

#### **TECHNICAL APPENDIX 13.2: CALIBRATION CERTIFICATES**

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#### A.1 CALIBRATION CERTIFICATE NL52 01265451



## **CERTIFICATE** OF CALIBRATION





Date of Issue: 16 April 2024

Calibrated at & Certificate issued by:

ANV Measurement Systems

Beaufort Court 17 Roebuck Way

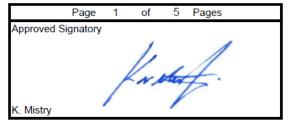
Milton Keynes MK5 8HL

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: UCRT24/1583



**CUSTOMER** Wood Group UK Ltd

> St Vincent Plaza 319 St. Vincent Street

Glasgow G2 5LD

ORDER No 26014020 Job No UKAS24/04303

DATE OF RECEIPT 12 April 2024

**PROCEDURE** Procedure TP 9 - Calibration of Filters

IDENTIFICATION Manufacturer Model Serial No

> Filters in sound level meter Rion NL-52 01265451

> Periodic tests were performed in accordance with procedures from IEC 61260-3 Filters Type Approved to IEC 61260-1:2014 PTB

CALIBRATED ON 16 April 2024

**PREVIOUS** Calibrated on 25 May 2022 Certificate No. UCRT22/1691 issued by

CALIBRATION this laboratory.

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Emmock 400 kV Substation Page 2 November 2024



## **A.2 CALIBRATION CERTIFICATE NL52 732101**



## CERTIFICATE OF CALIBRATION





0653

Date of Issue: 22 May 2023
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

Page 1 of 2 Pages
Approved Signatory

K. Mistry

Certificate Number: UCRT23/1688

Customer ANV Measurement Systems

Beaufort Court 17 Roebuck Way Milton Keynes MK5 8HL

Order No. ANV MS HIRE

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

Manufacturer Instrument Type Serial No. / Version Rion Sound Level Meter NL-52 00732101 Rion Firmware 2.0 Rion Pre Amplifier NH-25 32129 UC-59 Rion Microphone 05286 NC-74 34536109 Rion Calibrator Calibrator adaptor type if applicable NC-74-002

Performance Class

Identification

Test Procedure TP 2.SLM 61672-3 TPS-49

Procedures from IEC 61672-3:2006 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2002 YES Approval Number 21.21 / 13.02

If YES above there is public evidence that the SLM has successfully completed the

applicable pattern evaluation tests of IEC 61672-2:2003

Date Received 19 May 2023 ANV Job No. UKAS23/05356

Date Calibrated 22 May 2023

The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3:2006, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organisation responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2:2003, to demonstrate that the model of sound level meter fully conformed to the requirements in IEC 61672-1:2002, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1:2002.

Previous Certificate	Dated	Certificate No.	Laboratory
	08 March 2022	UCRT22/1337	0653

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## A.3 CALIBRATION CERTIFICATE NL52 1032445



## CERTIFICATE OF CALIBRATION





0653

Date of Issue: 28 June 2023 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 Me

Certificate Number: UCRT23/1846

Page Pages Approved Signatory K. Mistry

Customer ANV Measurement Systems

> Beaufort Court 17 Roebuck Way Milton Keynes MK5 8HL

Order No. ANV MS HIRE

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

> Manufacturer Instrument Туре Serial No. / Version NL-52 01032445 Rion Sound Level Meter Rion **Firmware** 2.0 Rion Pre Amplifier NH-25 32473 Rion Microphone UC-59 05833 NC-74 Rion Calibrator 34536109

NC-74-002 Calibrator adaptor type if applicable

Performance Class

Identification

TP 2.SLM 61672-3 TPS-49 Test Procedure

Procedures from IEC 61672-3:2006 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2002 YES Approval Number 21.21 / 13.02

If YES above there is public evidence that the SLM has successfully completed the

applicable pattern evaluation tests of IEC 61672-2:2003

Date Received 28 June 2023 ANV Job No. UKAS23/06433

Date Calibrated 28 June 2023

The sound level meter submitted for testing has successfully completed the class 1 periodic tests of IEC 61672-3:2006, for the environmental conditions under which the tests were performed. As public evidence was available, from an independent testing organisation responsible for approving the results of pattern evaluation tests performed in accordance with IEC 61672-2:2003, to demonstrate that the model of sound level meter fully conformed to the requirements in IEC 61672-1:2002, the sound level meter submitted for testing conforms to the class 1 requirements of IEC 61672-1:2002.

Previous Certificate Dated Certificate No. Laboratory 30 June 2021 UCRT21/1815 0653

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#### A.4 CALIBRATION CERTIFICATE NL52 887270

Emmock 400 kV Substation Page 4 November 2024



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## **CERTIFICATE** OF CALIBRATION





0653

Date of Issue: 04 March 2024 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 Syste

Page Pages pproved Signatory K. Mistry

Certificate Number: UCRT24/1368

Customer ANV Measurement Systems

> Beaufort Court 17 Roebuck Way Milton Keynes MK5 8HL

Order No. ANV MS HIRE

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

Identification Manufacturer Instrument Serial No. / Version Type Sound Level Meter NL-52 00887270 Rion Rion Firmware 20 Rion Pre Amplifier NH-25 87426

Rion Microphone UC-59 14021 Rion Calibrator NC-75 34334830 Calibrator adaptor type if applicable NC-75-022

Performance Class

TP 10. SLM 61672-3:2013 Test Procedure

Procedures from IEC 61672-3:2013 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2013

If YES above there is public evidence that the SLM has successfully completed the

applicable pattern evaluation tests of IEC 61672-2:2013

Date Received 22 February 2024 ANV Job No. UKAS24/02166

Date Calibrated 04 March 2024

The sound level meter submitted for testing has successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organisation responsible for approving the results of patternevaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the class 1 specifications of IEC 61672-1:2013.

Previous Certificate Certificate No. Dated Laboratory 0653 12 May 2022 UCRT22/1646

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## **A.5 CALIBRATION CERTIFICATE CUBE 11111**

Emmock 400 kV Substation Page 5 November 2024

# Chapitre 1. **CONSTAT DE VERIFICATION** VERIFICATION CERTIFICATE

CV-MET-22-97227

DELIVRE A: ACOUSTIC 1 DELIVERED TO:

> The Barn, Overdale Manordeilo, Llandeilo

SA19 7BD CARMARTHENSHIRE

**ROYAUME UNI** 

INSTRUMENT VERIFIE

INSTRUMENT CHECKED

Désignation : Sonomètre Intégrateur-Moyenneur Designation: Integrating-Averaging Sound Level Meter

Constructeur: 01dB

Manufacturer:

Type: N° de serie : **CUBE** 11111 Type: Serial number:

> N° d'identification: Identification number

Date d'émission : 04/11/2022 Date of issue:

Ce constat comprend This certificate includes

4 pages pages

LE RESPONSABLE SAV AFTER SALE MANAGER



Mounir HAFID

LA REPRODUCTION DE CE CONSTAT N'EST AUTORISEE QUE SOUS LA FORME DE FAC-SIMILE PHOTOGRAPHIQUE INTEGRAL

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED OTHER THAN IN FULL BY PHOTOGRAPHIC PROCESS

CE DOCUMENT NE PEUT PAS ETRE UTILISE EN LIEU ET PLACE D'UN CERTIFICAT D'ETALONNAGE. CE DOCUMENT EST REALISE SUIVANT LES RECOMMANDATIONS DU FASCICULE DE DOCUMENTATION X 07-011.

THIS DOCUMENT CAN'T BE USED AS CALIBRATION CERTIFICATE. IT IS COMPLIANT WITH THE X 07-011 STANDARD RECOMMENDATIONS.

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#### A.6 CALIBRATION CERTIFICATE B&K 2052327

Emmock 400 kV Substation Page 6 November 2024



TRANSMISSION



## CERTIFICATE OF CALIBRATION



of

Certificate Number: UCRT24/1570

Page

Approved Signatory

Mistry



0653

Pages

Date of Issue: 15 April 2024

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

Customer Wood Group UK Ltd

> St Vincent Plaza 319 St. Vincent Street

Glasgow G2 5LD

Order No. 26014020

Test Procedure Procedure TP 1 Calibration of Sound Calibrators

Description Acoustic Calibrator

Identification Manufacturer Instrument Model Serial No.

2052327 Brüel & Kjær Calibrator 4231

The calibrator has been tested as specified in Annex B of IEC 60942:2003. As public evidence was available from a testing organisation (PTB) responsible for approving the results of pattern evaluation tests, to demonstrate that the model of sound calibrator fully conformed to the requirements for pattern evaluation described in Annex A of IEC 60942:2003, the sound calibrator tested is considered to conform to all the class 1 requirements of IEC 60942:2003.

ANV Job No. UKAS24/04303

Date Received 12 April 2024

15 April 2024 Date Calibrated

Previous Certificate 20 April 2022 Dated

UCRT22/1540 Certificate No.

Laboratory 0653

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