

Appendix 10-3 CALIBRATION CERTIFICATES



APPENDIX 10-3 CALIBRATION CERTIFICATES



CERTIFICATE OF CALIBRATION





Date of Issue: 13 January 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

Certificate Number: UCRT23/1053

pproved Signator K. Mistry

Customer AWN Consulting Limited

The Tecpro Building

IDA Business and Technology Park

Clonshaugh Dublin

D17 XD90, Ireland

Order No. DOD/22/Cal045

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

Identification Manufacturer Instrument Serial No. / Version Type 00564809 Ring Sound Level Meter NL-52 Rion Firmware 2.0

Rion Pre Ampiffier NH-25 64934 UC-59 09447 Ring Microphone Brüel & Klær Calibrator 4231 2263026 Calibrator adaptor type if applicable UC 0210

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 Yes

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 09 January 2023 ANV Job No. UKAS23/01009

13 January 2023 Date Calibrated

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 15 September 2020 UCRT20/1868



CERTIFICATE OF CALIBRATION		Certificate Number						
UKAS Accredited Calibration Laboratory No. 0653	Page	2	of	2	Pages			

UKAS Accredited Callb	ration Laboratory I	<u>No. 06</u>	53		Page	2	of	2	Pages	
Sound Level Meter Inst	ruction manual an	d data	used to a	dlust the	sound leve	els Indi	lcated.	1		
SLM instruction manual tit		Descr	iption for IE	C 61672	-1					
SLM instruction manual re	f/Issue	N	b. 56034 21	1-03	Source	Rion				
Date provided or internet	download date	1	19 March 20	121						
•	Case Corrections	Wind	Shield Con	rections	Mic Pres	sure to	Free I	field C	orrectio	ms.
Uncertainties provided	Yes		Yes				Yes			
Total expanded uncertaint		ementa	of IEC 616	72-1:20	13 YES					
Specified or equivalent Ca			Equivaler							
Customer or Lab Calibrate		Cus	tomers Cal							
Calibrator adaptor type if a	applicable		UC 0210							
Calibrator cal. date		10	0 January 2	023						
Calibrator cert. number		į,	JCRT23/10	136						
Calibrator cal cert issued i	by Lab		0653							
Calibrator SPL @ STP	•		93.96	dB	Calibration r	eferen	ce soul	nd pred	ssure le	ve
Calibrator frequency			999.97	Hz	Calibration o	theck fi	requen	CV .		
Reference level range			Single							
Accessories used or come	cted for during callb	ration -	Exte	ension Ca	able & Wind:	Shleid	WS-15			
Note - The Extension Cab		n the S	ELM and the	e pre-ami	o for this call	bration				
Environmental conditions			Start		End					
	Temperature		23.19		22.90	±	0.30		I	
	Humidity		46.5		44.5	±	3.00	%RH	Ī	
	Ambient Pressure		99.66		99.71	±	0.03	kPa		•
Indication at the Calibratio	n Check Frequency	-								
Initial Indicated level		dΒ			dicated level		94.0		ďΒ	
Uncertainty of calibrator u	sed for indication at	the Ca	libration Ct	neck Free	uency ±		0.10		Œ	
Self Generated Noise										•
Microphone Installed -		.9	dB AWe	lighting			_			
Microphone replaced with	electrical input devi-	08 -	UR	- Under	Range Indica	sted		_		
Weighting	A		С			Z				
12	2.1 dB UR	16	.2 dB	UR	22.4	ďB	UR	1		
Self Generated Noise repi	orted for information	only a	nd not used	i to asser	ss conformar	nce to a	a requii	ement		

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.

<u>Additional Comments</u> The results on this certificate only relate to the Items calibrated as identified above.

Prior to calibration the meter was realigned (1.0 dB drift).

		END		
Calibrated by:	PB		R	İ

Appendix 10-3 2 July 2025







Certificate Number: UCRT23/1774

Page

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C. Mistry



0653

Date of Issue: 13 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 Measurement Systems

Customer AWN Consulting Limited

The Tecpro Building

IDA Business and Technology Park

Clonshaugh Dublin D17 XD90 Ireland

Order No. AWN200423

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

Serial No. / Version Identification Manufacturer Instrument Type Rion Sound Level Meter NL-52 00186668 Rion Firmware 2.1 Rion Pre Amplifier NH-25 76701 UC-59 12813 Rion Microphone NC-74 34536109 Rion Calibrator

Calibrator adaptor type if applicable NC-74-002

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

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

Type Approved to IEC 61672-1:2013 Yes

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 13 June 2023 ANV Job No. UKAS23/06399

Date Calibrated 13 June 2023

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 pattern-evaluation 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 Dated Certificate No. Laboratory
03 May 2022 UCRT22/1600 0653



CERTIFICATE OF CALIBRATION Certificate Number UCRT23/1774 UKAS Accredited Calibration Laboratory No. 0653 Page 2 of 2 Pages

Sound Level Meter Instruction manual and data used to adjust the sound levels indicated. SLM instruction manual title NL-52/NL-42 Description for IEC 61672-1 SLM instruction manual ref / issue No. 56034 21-03 Source Date provided or internet download date 19 March 2021 Case Corrections | Wind Shield Corrections Mic Pressure to Free Field Corrections Yes Uncertainties provided Yes Yes Total expanded uncertainties within the requirements of IEC 61672-1:2013 YES Specified or equivalent Calibrator Specified Customer or Lab Calibrator Lab Calibrator Calibrator adaptor type if applicable NC-74-002 Calibrator cal. date 30 May 2023 Calibrator cert. number UCRT23/1727 Calibrator cal cert issued by Lab 0653 Calibrator SPL @ STP 94.02 dB Calibration reference sound pressure level Calibrator frequency 1001.99 Hz Calibration check frequency Reference level range Single dB Extension Cable & Wind Shield WS-15 Accessories used or corrected for during calibration -Note - The Extension Cable was used between the SLM and the pre-amp for this calibration. Environmental conditions during tests End Start Temperature 24.08 24.03 0.30 °C Humidity 41.0 35.8 3.00 %RH ± 100.41 100.43 Ambient Pressure 0.03 kPa Indication at the Calibration Check Frequency Initial indicated level 94.0 dB Adjusted indicated level 94.0 dB 0.10 Uncertainty of calibrator used for Indication at the Calibration Check Frequency ± dB Self Generated Noise Less Than Microphone installed -19.2 dB A Weighting Microphone replaced with electrical input device -UR = Under Range indicated Weighting dB UR 16.5 dB UR dB Self Generated Noise reported for information only and not used to assess conformance to a requirement 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. Additional Comments The results on this certificate only relate to the items calibrated as identified above. Prior to calibration the instrument's main PCB was replaced and the meter was realigned. END Calibrated by: K. Zablocki R 1







Certificate Number: UCRT22/1142

Page

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0653

Pages

Date of Issue: 01 February 2022

Calibrated at & Certificate issued by:

ANV Measurement Systems

Beaufort Court 17 Roebuck Way Milton Keynes MK5 8HL

Customer

Identification

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Acoustics Noise and Vibration Ltd trading as ANV Measurement Systems

AWN Consulting Limited The Tecpro Building

IDA Business and Technology Park

Clonshaugh Dublin D17 XD90

Order No. DOD/22/Cal/038

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

Manufacturer Instrument Serial No. / Version Type Rion Sound Level Meter NL-52 00998409 Rion Firmware 2.0 Pre Amplifier NH-25 98623 Rion UC-59 15915 Rion Microphone Brüel & Kjær Calibrator 4231 3010472 Calibrator adaptor type if applicable UC 0210

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

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

Type Approved to IEC 61672-1:2013 Yes

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 26 January 2022 ANV Job No. UKAS22/01059

Date Calibrated 01 February 2022

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 pattern-evaluation 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 Dated Certificate No. Laboratory 07 May 2020 UCRT20/1406 0653



CERTIFICATE OF CALIBRATION UCRT22/1142 UKAS Accredited Calibration Laboratory No. 0653 Certificate Number UCRT22/1142 Page 2 of 2 Pages

Sound Level Mete	r Inst									id leve	ls indi	icated.			
SLM instruction mar	nual tit	le	NL-52	/NL-42	Desc	ription	for IEC	61672	2-1						
SLM instruction mar	nual re	f / issu	e		N	lo. 56	034 21-0	03	Source	e	Rion				
Date provided or int	ernet o	downlo	ad date	е		19 Ma	arch 202	1							
		Case	Corre	ctions	Wind	Shie	ld Corre	ctions	M	c Pres	sure to	Free F	Field C	orrecti	ons
Uncertainties provid			Yes				Yes					Yes			
Total expanded unc	ertaint	ies with	hin the	requir	ement			2-1:20	13	YES					
Specified or equivale			r				uivalent								
Customer or Lab Ca	alibrato	or			Cus	stome	rs Calib	rator							
Calibrator adaptor ty	pe if a	applical	ble			UC	0210								
Calibrator cal. date					0	1 Feb	ruary 20	22							
Calibrator cert. num	ber					UCRI	T22/113	6							
Calibrator cal cert is	sued t	by Lab				0	0653								
Calibrator SPL @ S	TP					94.0	3	dB	Calibr	ation n	eferen	ce sour	nd pres	ssure le	evel
Calibrator frequency	/					999.9	97	Hz	Calibr	ation c	heck f	requen	cv		
Reference level rand	ge					Singl	le	dB					,		
Reference level ran Accessories used or	r corre	cted fo	r durin	g calib	ration	-	Extens		able &	Wind 9	Shield	WS-15			
Note - The Extensio															
Environmental cond						Star			End						
Zilviloriiloritai ooria	10110	Tempe			_	24.5			24.56		±	0.30	°C	1	
		Humid		,	_	40.6			39.9		±		%RH	1	
		Ambie			\vdash	100.9			100.98	-	±	0.03		1	
Indication at the Cal	ibratio					100.5	10		100.50		I	0.03	KPa		1
		II Chec		quency		_									-
Initial indicated			94.1		dB	<u>. </u>				d level		94.0		dB	1
Uncertainty of calibr		sed for	Indica	tion at	the Ca	alibrat	ion Che	ck Fred	quency	/±		0.10		dB	1
Self Generated Nois						Lin			т						
Microphone installed Microphone replace		Less			3.8	dB	A Weig					7			
Microphone replace															
	a with			ut devi	ce -		UR =	Under	Range				т		
Weighting		A	١.				c				Z		I		
Weighting	11	1.2	dB	UR	1	4.8	dB	UR	2	1.3	Z dB	UR	I		
	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	ŧ	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting	11	1.2	dB	UR	1		dB	UR	2	1.3	Z dB	_	rement	t	
Weighting Self Generated Nois	11	I.2 Indicate	dB or infor	UR mation	1. only a	and no	C dB tused to	UR o asse	2 ss con	1.3 forman	Z dB ice to a	a requir			ridina
Weighting Self Generated Nois The reported expans	11 se repo	I.2 Incred for	dB or infon	UR mation	only a	and no	C dB tused to	UR o asse	2 ss con	1.3 forman	Z dB ice to a	a requir	ctor k=	2, prov	
Weighting Self Generated Nois The reported expans a coverage probabil	11 se repo ded ur ity of a	I.2 Incred for	dB or infon	UR mation	only a	and no	C dB tused to	UR o asse	2 ss con	1.3 forman	Z dB ice to a	a requir	ctor k=	2, prov	
Self Generated Nois The reported expan- a coverage probabil UKAS requirements	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and no	dB t used to	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Weighting Self Generated Nois The reported expans a coverage probabil	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and no	C dB tused to	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Self Generated Nois The reported expans a coverage probabil UKAS requirements Additional Comment	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and no	dB t used to	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Self Generated Nois The reported expan- a coverage probabil UKAS requirements	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and no	dB t used to	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Self Generated Nois The reported expans a coverage probabil UKAS requirements Additional Comment	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and no	dB t used to	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Self Generated Nois The reported expans a coverage probabil UKAS requirements Additional Comment	11 se repo ded ur ity of a	ncertain	dB or information on typis b mately	uR mation	only a	and	C dB tused to duncertainty evanual control of the c	UR o asse	2 ss con	1.3 forman	Z dB ice to a ce to a	a requir age fac out in a	ctor <i>k</i> =	2, province wi	
Self Generated Nois The reported expans a coverage probabil UKAS requirements Additional Comment	11 se repo ded ur ity of a	ncertain	dB or informately inty is b mately	uration mation assed of 95%.	only a	and	dB t used to	UR o asser ainty m aluation e to the	2 ss con	1.3 forman	Z dB ace to a cover- arried o	age fac out in a	ctor <i>k</i> =	2, province wi	

Appendix 10-3 6 July 2025









0653

Date of Issue: 04 September 2023

Calibrated at & Certificate issued by:
ANV Measurement Systems
Beaufort Court
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Milton Keynes MK5 8HL
Telephone 01908 642846 Fax 01908 642814
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Web: www.noise-and-vibration.co.uk

Certificate Number: UCRT23/2135

	Page	1	of	2	Pages	
Approved S	ignatory			/		
				/		
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		/				
K. Mistry						

Customer AWN Consulting Limited

Acoustics Noise and Vibration Ltd trading as ANV Measurement Systems

The Tecpro Building

17, Clonshaugh Business & Technology Park

Dublin

Order No. AWN160823

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator Identification Manufacturer Instrument Type Serial No.

Manufacturer Instrument Serial No. / Version Type Rion Sound Level Meter NL-52 00575782 Rion Firmware 2.0 NH-25 65810 Rion Pre Amplifier Rion Microphone UC-59 19108 Rion Calibrator NC-75 34724227 Calibrator adaptor type if applicable NC-75-022

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

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

Type Approved to IEC 61672-1:2013 Yes

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 01 September 2023 ANV Job No. UKAS23/09603

Date Calibrated 04 September 2023

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 pattern-evaluation 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 Dated Certificate No. Laboratory
12 July 2021 UCRT21/1841 0653



CERTIFICATE OF CALIBRATION UCRT23/2135 UKAS Accredited Calibration Laboratory No. 0653 Certificate Number UCRT23/2135 Page 2 of 2 Pages

SLM instruction ma	ei illouucu	on man	uai an	<u>d data</u>	used to ad	just the	sound leve	ls indi	cated.			
SEM INSURCION IN	nual title	NL-52	2/NL-42	Descr	iption for IE(61672	!-1					
SLM instruction ma	nual ref / is	sue		N	o. 56034 21-	03	Source	Rion				
Date provided or in	ternet dowr	nload dat	te	1	9 March 202	21						
	Ca	se Corre	ctions	Wind	Shield Corre	ections	Mic Press	sure to	Free F	ield Con	rectio	ns
Uncertainties provi	ded	Yes			Yes				Yes			
Total expanded un	certainties v	within the	e requir	ements	of IEC 616	72-1:20	13 YES					
Specified or equiva		ator			Specified							
Customer or Lab C	alibrator			I	Lab Calibrat	or						
Calibrator adaptor	type if appli	cable			NC-75-022							
Calibrator cal. date				04	September 2	2023						
Calibrator cert. nun	nber			l l	JCRT23/213	10						
Calibrator cal cert i	ssued by La	ab			0653							
Calibrator SPL @ S	STP				94.03	dB	Calibration re	eferenc	ce soun	d pressu	ire le	vel
Calibrator frequence	v				999.99	Hz	Calibration c					
Reference level rar	-				Single	dB	-		oquomo	,		
Accessories used of		for duri	ng calib	ration -			able & Wind 9	Shield \	WS-15			
Note - The Extensi												
Environmental con					Start		End					
Environmental con		nperatur			24.52	+	24.65	±	0.30	°C		
	_	nidity	-		40.8	+	41.8	±	3.00			
	_				101.16	+	101.12		0.03			
Indication at the Co		bient Pre			101.10		101.12	±	0.03	KPa	\neg	
Indication at the Ca			quericy									
Initial indicate		94.1		dB			idicated level		94.0	d		
Uncertainty of calib		for Indica	ation at	tne Ca	libration Che	eck Fre	quency ±		0.10	d	В	
Self Generated No					-ID A 18/-:	1.6	•					
Microphone installe		s Than		3.7	dB A Wei				T			
Microphone replace	ed with elec	trical inp	ut devi	ce -	UR =	Under	Range indica		Щ,			
Weighting		A			c							
	12.5	dB	UR		'.4 dB	UR	24.6	dB	UR			
Self Generated No	se reported	for info	mation	only a	nd not used	to asse	ss conforman	ce to a	require	ement		
								00 10 0	. roquii	ontone		
								00 10 0	roquii	omont		
								00 10 0	roquii	omont		
								00 10 0	roquii	omone		
								00 10 0	roquii	omone		
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								00 10 2	. roquii	Smon		
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								00 10 1				
The reported expans	nded uncert	taintu is l	nased o	un a eta	ndard uncer						provid	dina
The reported expar						tainty m	nultiplied by a	covera	age fact	tor <i>k</i> = 2,		
a coverage probab	lity of appro					tainty m	nultiplied by a	covera	age fact	tor <i>k</i> = 2,		
a coverage probab UKAS requirement	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab UKAS requirement Additional Commer	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab UKAS requirement	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab UKAS requirement Additional Commer	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab UKAS requirement Additional Commer	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	
a coverage probab UKAS requirement Additional Commer	lity of appro	oximatel	y 95%.	The ur	ncertainty ev	tainty n	nultiplied by a n has been ca	covera rried o	age fact	tor k=2, cordanc	e with	





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UKAS23/06399

Certificate Number: UCRT23/1773



Date of Issue: 13 June 2023 Calibrated at & Certificate issued by:

ANV Measurement Systems

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Customer

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Acoustics Noise and Vibration Ltd trading as ANV Measurement Syste

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Clonshaugh Dublin D17 XD90 Ireland

Order No. AWN200423

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

Identification Manufacturer Instrument Type Serial No. / Version Rion Sound Level Meter NL-52 00186667 Rion Firmware 2.1 Rion Pre Amplifier NH-25 76817 Rion UC-59 21140 Microphone

> Rion NC-74 34536109 Calibrator NC-74-002 Calibrator adaptor type if applicable

Performance Class

Test Procedure TP 10. SLM 61672-3:2013

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 13 June 2023 ANV Job No.

Date Calibrated 13 June 2023

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 Dated Certificate No. Laboratory 12 May 2022 UCRT22/1645 0653



CERTIFICATE OF CALIBRATION UCRT23/1773 UKAS Accredited Calibration Laboratory No. 0653 Certificate Number UCRT23/1773 Page 2 of 2 Pages

Sound Level Meter Inst	ruction manual an	d data used	to adi	ust the	sound	level	s indi	cated			
SLM instruction manual tit	de NL-52/NL-42	Description	for IEC	61672)-1	10101	o man	outou.			
SLM instruction manual re	ef / issue	No. 560			Source		Rion				
Date provided or internet	download date		rch 202								
	Case Corrections	Wind Shield			Mic	Press	ure to	Free F	ield Co	orrectiv	ne
Uncertainties provided	Yes	Y	es	000110	IVIIC	1 1033	uie to	Yes	ieid Cc	mocac	JI18
Total expanded uncertaint				2-1:20	13	YES		100	-		
Specified or equivalent Ca			cified	- 1.20		120					
Customer or Lab Calibrato			alibrato	r							
Calibrator adaptor type if a			74-002								
Calibrator cal. date	.,,		ay 2023								
Calibrator cert, number			23/1727								
Calibrator cal cert issued to	by Lab		653								
Calibrator SPL @ STP	-,	94.02		dB	Colibrat	ion so	foron o			1	1
Calibrator frequency		1001.9			Calibrat					sure le	evei
Reference level range					Calibrat	ion cn	eck tre	equen	су		
Accessories used or corre	oted for during cellih	Single		dB	-bl- 0 14	fleed O	blald M	VO 45			
Note - The Extension Cab					able & W			VS-15			
Environmental conditions	during tests			re-am		calibi	ation.				
		Start			End	_					
	Temperature	23.69			23.80	\rightarrow	±	0.30			
	Humidity	35.1			36.7	\rightarrow	±		%RH		
ladiantian and a California	Ambient Pressure	100.4	1		100.42		±	0.03	kPa		
Indication at the Calibratio											
Initial indicated level		dB	Adju	sted in	dicated l	level		94.0		dB	
Uncertainty of calibrator us	sed for Indication at	the Calibration	on Che	ck Fred	quency ±	:		0.10		dB	
Self Generated Noise											
Microphone installed -			A Weigl								
Microphone replaced with	electrical input devi	ce -	UR = I	Under I	Range in	ndicate	ed				
Weighting	Α		С			Z					
11		15.7	dB	UR	22.3			UR			
Self Generated Noise repo	orted for information	only and not	t used to	asses	ss confo	rmano	e to a	requir	ement		
The reported expanded un	certainty is based o	n a standard	uncerta	ainty m	ultiplied	by a c	overa	ge fac	tor $k=2$. provi	idina
a coverage probability of a	pproximately 95%.	The uncertai	inty eva	luation	has bee	en can	ried ou	ut in ac	cordan	ce wit	h
UKAS requirements.			•								-
	The results on this	certificate onl	lv relate	to the	items or	alibrat	ac ha	identifi	ad aba	We.	
	The results on this t	ser unicate orn	ly relate	to the	itellia ce	allulat	eu as	uenun	eu abo	ve.	
Prior to calibration the instr	rument's main DCD	wae renland	d and th	e mete	or week re	valiana	nd.				
no to canoration the met	uments main FCB	was replaced	u and th	e mete	n was re	angne	d.				
			ND								
		EI	ND	• • • • • • • • • • • • • • • • • • • •							
Calibrated by: C. Hirl	av										R 3







Certificate Number: UCRT22/1378

Page

opproved Signatory

Mistry



Date of Issue: 16 March 2022 Calibrated at & Certificate issued by:

ANV Measurement Systems

Beaufort Court 17 Roebuck Way Milton Keynes MK5 8HL

Customer

Telephone 01908 642846 Fax 01908 642814

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Acoustics Naise and Vibration Util Inading as ANY Measurement Systems

AWN Consulting Limited

The Tecpro Building IDA Business and Technology Park

Clonshaugh Dublin D17 XD90 Ireland

Order No. 2201

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator Identification Manufacturer Instrument Type Serial N

Serial No. / Version Manufacturer Instrument Type NL-52 00998413 Rion Sound Level Meter 2.0 Rion Firmware 98627 NH-25 Rion Pre Amplifier UC-59 15920 Rion Microphone Rion Calibrator NC-74 34536109 Calibrator adaptor type if applicable NC-74-002

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

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

Type Approved to IEC 61672-1:2013 Yes

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 16 March 2022 ANV Job No. UKAS22/03189

Date Calibrated 16 March 2022

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 pattern-evaluation 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 Dated Certificate No. Laboratory 22 January 2020 UCRT20/1095 0653



CERTIFICAT	E OF CALII	BRATION		Certificate Number UCRT22/1378				
UKAS Accredited Ca	ibration Laboratory	No. 0653		Page	2	of	2	Pages
Sound Level Meter In	struction manual an	d data used to ad	ust the so	und leve	ls Ind	icated		
SLM instruction manual		Description for IEC						
SLM instruction manual		No. 56034 21-		ince	Rion			
Date provided or interne	et download date	19 March 200	21					
	Case Corrections	Wind Shield Corn	ections	Mic Pres	sure to	Free	Field (Corrections
Uncertainties provided	Yes	Yes			1	Yes	100000	
Total expanded uncerta	inties within the requir	ements of IEC 616	2-1:2013	YES	12			
Specified or equivalent		Specified						
Customer or Lab Calibr	- Contract	Lab Calibrate	OF .					
Calibrator adaptor type	f applicable	NC-74-002						
Calibrator cal. date		17 February 2						
Calibrator cert. number		UCRT22/12/	6					
Calibrator cal cert issue	d by Lab	0653						
Calibrator SPL @ STP		94.03	dB Cal	bration n	eferen	ce sou	nd pre	ssure leve
Calibrator frequency		1002.04	Hz Cal	bration o	heck f	requen	cy	
Reference level range		Single	dB				(53)	
Accessories used or co Note - The Extension C		Control Control	sion Cable pre-amp for					
Environmental condition		Start	En					
	Temperature	23.81	23.	91	±	0.30	*C	7
	Humidity	36.9	36	0	±	3.00	%RH	
	Ambient Pressure	100.50	100	50	±	0.03	kPa	10 mg
Indication at the Calibra	ion Check Frequency							
Initial indicated lev	el 94.3	dB Ad)	sted indica	ted level	-	94.0	7.—	dB
Uncertainty of calibrator	used for Indication at	the Calibration Cho	ck Frequen	cy ±		0.10		dB
Self Generated Noise		grand on lay		0.0000		21,000		300000
Microphone installed -	Less Than 16	dB A Weig	hting			2		
Microphone replaced wi	th electrical input devi	:e - UR =	Under Ran	ge indica	ted		0	
Weighting	A	C			Z		1	
	12.2 dB UR	16.1 dB	UR	21.9	dB	UR	1	
		only and not used						

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.

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

None			
		END	
Calibrated by:	A.Hutton		3