

# **Calibration Certificate**

0025914

Customer : Cinotech Consultants Limited RM 1710, Technology Park,		Object 1 : Serial No. /Ref. No. : Object 2 :	Microphone
18 On Lai Street, Shatin, N.T. Hong Kong Customer Code : SVEC09005		Serial No. /Ref. No. : Manufacturer : Sva	
Date of calibration: Date of the recommended re-calibration:	22/01/2021 22/01/2022	Certificate No.: Handle by:	0025914 E0002

#### **Measuring results**

Reference value	Indication value	Deviation	Allowed deviation	Object
94.0dB	93.6dB	-0.4dB	+/- 1.5dB	1
114.0dB	113.5dB	-0.5dB	+/- 1.5dB	1

#### Measuring equipment

index	Calibrator / Master	Traceability
1	Master Sound Meter, SVAN949,sn:8571	IEC61672
2	Sound Calibrator, SV30A sn:32580	IEC60942

#### **Ambient conditions**

Temperature (20...26)°C

Humidity (20...60)%RH

#### Measuring procedure

Calibrated by Type 1 Sound Calibrator with Master Sound Level Meter under 1kHz Frequency.

#### Uncertainty

+/- 0.2 dB for probability not less than 95%.

#### Conformity

1. The resulted values were those obtained at the time of test and applies only to the item calibrated.

2. The measurement uncertainty was calculated according to the regulations of GUM with the coverage factor k=2 and contains

the uncertainty of the measuring procedure and the uncertainty of the measuring system.

3. The equipment being used in this calibration are regularly calibrated by laboratory according to ISO/IEC17025.

4.HKAS has accredited this laboratory (HOKLAS 267) for specific calibration activities as listed in the HOKLAS directory of accredited laboratories.

5. The calibrations certificate may not be reproduced.

Measured value(s)

the allowable deviation.

Performed by

Calibration Technician

Approved by

Quality Manager

Report No.

Rm 1904, Technology Park 18 On Lai Street, Shatin NT, Hong Kong Tel: +852 3841 4388 Website: https://www.hpct.com.hk

: 00152



Issue Date : 19 Nov 2021

: HP00034 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-01 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 570183 Microphone No. 570605 10 Nov 2021 Data Pacaivad .

Date Received	:	10 NOV 2021
Test Period	:	10 Nov 2021 to 17 Nov 2021
Test Requested	:	Performance checking for Sound Level Meter
Test Method	:	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	:	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	:	Refer to the test result(s) on page 2.

: 1. Information of the sample description provided by the Applicant. Remark

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

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Issue Date : 19 Nov 2021

Report No.:00152Application No.:HP00034

# **Certificate of Calibration**

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

### Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+0.1	± 1.5
114.0	114.0	0.0	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

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Issue Date : 04 Nov 2021

Report No. : 00145 Application No. : HP00029

**Certificate of Calibration** 

 Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong
Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-03 Manufacturer: : BSWA Technology Other information : Model No.

Serial No.	570188	
Microphone No.	570608	

Date Received	: 26 Oct 2021
Test Period	: 26 Oct 2021 to 02 Nov 2021
Test Requested	: Performance checking for Sound Level Meter
Test Method	: The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	: Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	: Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Lee Wai Kit Laboratory Manager

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Report No. : 00145 Application No. : HP00029

### Issue Date : 04 Nov 2021

# **Certificate of Calibration**

# Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

### Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	-0.1	± 1.5
114.0	114.0	0.0	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

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: 00149



Issue Date : 16 Nov 2021

: HP00031 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Integrating Sound Level Meter. Equipment No.: : N-12-04 Manufacturer: : BSWA Technology Other information : Model No. **BSWA 308** Serial No. 580238 Microphone No. 590073 · 05 Nov 2021 Date Received

Date Received	•	05 100 2021
Test Period	:	08 Nov 2021 to 12 Nov 2021
Test Requested	:	Performance checking for Sound Level Meter
Test Method	:	The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.
Test conditions	:	Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%
Test Result	:	Refer to the test result(s) on page 2.

: 1. Information of the sample description provided by the Applicant. Remark

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

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Issue Date : 16 Nov 2021

Report No.:00149Application No.:HP00031

# **Certificate of Calibration**

Measuring

equipment

Description	Sound Calibrator
Manufacturer	Brüel & Kjær
Model No.	TYPE 4231
Serial No.	2326353
Equipment No.	N-02-01

### Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.7	-0.3	± 1.5
114.0	114.0	0.0	± 1.5

Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

2. The indication value was obtained from the average of ten replicated measurement.

Report No.

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: 00150



Issue Date : 16 Nov 2021

Application No. : HP00032 **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Sound Level Calibrator. Equipment No.: : N-13-01 Manufacturer: : SOUNDTEK Other information : Model No. ST-120 Serial No. 181001608 : 05 Nov 2021 Date Received Test Period : 08 Nov 2021 to 12 Nov 2021 : Performance checking for Sound Level Calibrator **Test Requested** Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent. **Test conditions** : Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

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Issue Date : 16 Nov 2021

Report No.:00150Application No.:HP00032

# **Certificate of Calibration**

Measuring equipment

iption Sound Calibrator	
urer Brüel & Kjær	
TYPE 4231	
2326353	
N-02-01	
Sound Meter	
BSWA Technology	
del No. BSWA 308	
570188	
570608	
N-12-03	

### Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+0.1	± 0.3
114.0	114.0	0.0	± 0.5

- Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
  - 2. The indication value was obtained from the average of ten replicated measurement.

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: 00161 Issue Date : 16 Nov 2021 Report No. : HP00041 Application No. **Certificate of Calibration** Applicant : Cinotech Consultants Limited RM 1710, Technology Park, 18 On Lai Street, Shatin, N.T., Hong Kong Sample Description : Submitted equipment stated to be Sound Level Calibrator. Equipment No.: : N-13-03 Manufacturer: : SOUNDTEK Other information : Model No. ST-120 Serial No. 181001637 : 05 Nov 2021 Date Received Test Period : 08 Nov 2021 to 12 Nov 2021 : Performance checking for Sound Level Calibrator **Test Requested** Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent. **Test conditions** : Room Temperature: 22-25 degree Celsius Relative Humidity: 35-70% Test Result : Refer to the test result(s) on page 2.

Remark : 1. Information of the sample description provided by the Applicant.2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

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Report No.:00161Application No.:HP00041

# **<u>Certificate of Calibration</u>**

Measuring equipment

Description	Sound Calibrator		
Manufacturer	Brüel & Kjær		
Model No.	TYPE 4231		
Serial No.	2326353		
Equipment No.	N-02-01		
Description	Sound Meter		
Manufacturer	facturer BSWA Technology		
Model No.	el No. BSWA 308		
Serial No.	570188		
Microphone No.	570608		
Equipment No.	N-12-03		

### Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+0.2	± 0.3
114.0	114.4	+0.4	± 0.5

- Note : 1. "Instrument Readings" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.
  - 2. The indication value was obtained from the average of ten replicated measurement.

- End of report -

Issue Date : 16 Nov 2021