High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA16034/05/0060

Project No. AM1 - Tin Hau Temple

Date: 10-Aug-26 Next Due Date: 10-Oct-26 Operator: SK

Equipment No.: A-01-05 Model No.: GS2310 Serial No. 10599

Ambient Condition			
Temperature, Ta (K)	304	Pressure, Pa (mmHg)	753.2

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05980	Intercept, bc	-0.04908
Last Calibration Date:	7-Jan-26	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-27	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	12.1	3.43	58.15	8.3	2.84
2	10.3	3.16	53.72	5.4	2.29
3	7.4	2.68	45.66	3.6	1.87
4	5.3	2.27	38.77	2.5	1.56
5	2.4	1.53	26.36	1.2	1.08

By Linear Regression of Y on X

Slope , mw = **0.0523** **Intercept, bw =** **-0.4033**

Correlation coefficient* = **0.9771**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.51**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Aug-26

Checked by: Henry Leung Signature: Date: 10-Aug-26

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA16034/08/0061

Project No. AM2 - Sai Tso Wan Recreation Ground

Date: 10-Aug-26 Next Due Date: 10-Oct-26 Operator: SK

Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

Ambient Condition			
Temperature, Ta (K)	304	Pressure, Pa (mmHg)	753.2

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05980	Intercept, bc	-0.04908
Last Calibration Date:	7-Jan-26	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-27	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.2	3.58	60.70	9.3	3.01
2	10.3	3.16	53.72	6.2	2.45
3	7.4	2.68	45.66	4.5	2.09
4	5.4	2.29	39.12	2.3	1.49
5	3.1	1.74	29.84	1.4	1.17

By Linear Regression of Y on X

Slope , mw = **0.0603** **Intercept, bw =** **-0.7221**

Correlation coefficient* = **0.9907**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.61**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Aug-26

Checked by: Henry Leung Signature: Date: 10-Aug-26

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA16034/03/0061

Project No. AM3 - Yau Lai Estate, Bik Lai House

Date: 10-Aug-26 Next Due Date: 10-Oct-26 Operator: SK

Equipment No.: A-01-03 Model No.: GS2310 Serial No. 10379

Ambient Condition			
Temperature, Ta (K)	304	Pressure, Pa (mmHg)	753.2

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05980	Intercept, bc	-0.04908
Last Calibration Date:	7-Jan-26	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-27	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.7	3.65	61.83	8.7	2.91
2	11.3	3.31	56.23	6.2	2.45
3	7.3	2.66	45.35	4.3	2.04
4	5.2	2.25	38.41	2.6	1.59
5	3.1	1.74	29.84	1.3	1.12

By Linear Regression of Y on X

Slope , mw = **0.0538** **Intercept, bw =** **-0.4666**

Correlation coefficient* = **0.9953**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.50**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 10-Aug-26

Checked by: Henry Leung Signature: Date: 10-Aug-26

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/039

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village

Date: 3-Jul-26 Next Due Date: 3-Sep-26 Operator: SK

Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

Ambient Condition			
Temperature, Ta (K)	301.8	Pressure, Pa (mmHg)	752.5

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05980	Intercept, bc	-0.04908
Last Calibration Date:	7-Jan-26	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-27	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.6	3.65	61.80	9.5	3.05
2	11.1	3.29	55.91	7.1	2.63
3	9.6	3.06	52.05	5.2	2.25
4	5.1	2.23	38.16	2.8	1.65
5	3.5	1.85	31.75	1.7	1.29

By Linear Regression of Y on X

Slope , mw = **0.0564** **Intercept, bw =** **-0.5255**

Correlation coefficient* = **0.9918**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.68**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 3-Jul-26

Checked by: Henry Leung Signature: Date: 3-Jul-26

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET

File No. MA20003/55/040

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village

Date: 3-Sep-26 Next Due Date: 3-Nov-26 Operator: SK

Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

Ambient Condition			
Temperature, Ta (K)	300.9	Pressure, Pa (mmHg)	749.7

Orifice Transfer Standard Information					
Serial No.	3864	Slope, mc	0.05980	Intercept, bc	-0.04908
Last Calibration Date:	7-Jan-26	**mc x Qstd + bc = [ΔH x (Pa/760) x (298/Ta)]$^{1/2}$**			
Next Calibration Date:	7-Jan-27	**Qstd = {[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$ -bc} / mc**			

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Calibration of TSP Sampler					
Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	[ΔH x (Pa/760) x (298/Ta)]$^{1/2}$	Qstd (CFM) **X - axis**	ΔW (HVS), in. of water	[ΔW x (Pa/760) x (298/Ta)]$^{1/2}$ **Y-axis**
1	13.5	3.63	61.55	9.4	3.03
2	11.2	3.31	56.14	7.2	2.65
3	9.5	3.05	51.76	5.0	2.21
4	5.1	2.23	38.15	2.6	1.59
5	3.6	1.88	32.18	1.9	1.36

By Linear Regression of Y on X

Slope , mw = **0.0559** **Intercept, bw =** **-0.5121**

Correlation coefficient* = **0.9880**

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

mw x Qstd + bw = [ΔW x (Pa/760) x (298/Ta)]$^{1/2}$

Therefore, Set Point; W = (mw x Qstd + bw)^2 x (760 / Pa) x (Ta / 298) = **3.67**

Remarks:

Conducted by: Wong Shing Kwai Signature: Date: 3-Sep-26

Checked by: Henry Leung Signature: Date: 3-Sep-26

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator — Date of Calibration: 30-Jul-26

Manufacturer: Sibata Scientific Technology LTD. — Validity of Calibration Record: 30-Sep-26

Model No.: LD-5R

Serial No.: 8Y2373

Equipment No.: SA-01-05 — Sensitivity: 0.001 mg/m3

High Volume Sampler No.: A-01-03 — Before Sensitivity Adjustment: 657

Tisch Calibration Orifice No.: 3864 — After Sensitivity Adjustment: 657

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	81.0	135.0
2	65.0	114.0
3	52.0	92.0
Average	**66.0**	**113.7**

By Linear Regression of Y on X

Slope , mw = 1.4763 — **Intercept, bw =** 16.2306

Correlation coefficient* = 0.9973

Set Correlation Factor	
Particulate Concentration by High Volume Sampler (µg/m^3)	113.7
Particulate Concentration by Dust Meter (µg/m^3)	66.0
Measuring time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] 1.7

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: _____

Technical Officer (Wong Shing Kwai)

Approved by: _____

Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator — Date of Calibration: 30-Jul-26

Manufacturer: Sibata Scientific Technology LTD. — Validity of Calibration Record: 30-Sep-26

Model No.: LD-5R

Serial No.: 972777

Equipment No.: SA-01-06 — Sensitivity: 0.001 mg/m3

High Volume Sampler No.: A-01-03 — Before Sensitivity Adjustment: 645

Tisch Calibration Orifice No.: 3864 — After Sensitivity Adjustment: 645

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	77.0	131.0
2	55.0	117.0
3	46.0	108.0
Average	**59.3**	**118.7**

By Linear Regression of Y on X

Slope , mw = **0.7221** **Intercept, bw =** **75.8191**

Correlation coefficient* = **0.9937**

Set Correlation Factor	
Particulate Concentration by High Volume Sampler (µg/m^3)	118.7
Particulate Concentration by Dust Meter (µg/m^3)	59.3
Measuring time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.0**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: _____

Technical Officer (Wong Shing Kwai)

Approved by: _____

Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator
Date of Calibration 30-Jul-26
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 30-Sep-26
Model No.: LD-5R
Serial No.: 972778
Equipment No.: SA-01-07
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-03
Before Sensitivity Adjustment 735 CPM
Tisch Calibration Orifice No.: 3864
After Sensitivity Adjustment 735 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	77.0	144.0
2	65.0	115.0
3	54.0	102.0
Average	**65.3**	**120.3**

By Linear Regression of Y on X

Slope , mw = **1.8350** **Intercept, bw =** **0.4458**

Correlation coefficient* = **0.9817**

Set Correlation Factor	
Particulate Concentration by High Volume Sampler (µg/m^3)	120.3
Particulate Concentration by Dust Meter (µg/m^3)	65.3
Measuring time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **1.8**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: _____
Technical Officer (Wong Shing Kwai)

Approved by: _____
Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator
Date of Calibration 30-Jul-26
Manufacturer: Sibata Scientific Technology LTD.
Validity of Calibration Record 30-Sep-26
Model No.: LD-5R
Serial No.: 972779
Equipment No.: SA-01-08
Sensitivity 0.001 mg/m3
High Volume Sampler No.: A-01-03
Before Sensitivity Adjustment 744 CPM
Tisch Calibration Orifice No.: 3864
After Sensitivity Adjustment 744 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor** Mass Concentration (µg/m3) **X-axis**	**HVS** Mass concentration (µg/m^3) **Y-axis**
1	72.0	152.0
2	65.0	127.0
3	56.0	109.0
Average	**64.3**	**129.3**

By Linear Regression of Y on X

Slope , mw = **2.6554** **Intercept, bw =** **-41.5000**

Correlation coefficient* = **0.9863**

Set Correlation Factor	
Particulate Concentration by High Volume Sampler (µg/m^3)	129.3
Particulate Concentration by Dust Meter (µg/m^3)	64.3
Measuring time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **2.0**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: _____
Technical Officer (Wong Shing Kwai)

Approved by: _____
Project Manager (Henry Leung)

CINOTECH CONSULTANTS LIMITED

Certificate of Calibration

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator — Date of Calibration: 30-Jul-26

Manufacturer: Sibata Scientific Technology LTD. — Validity of Calibration Record: 30-Sep-26

Model No.: LD-5R

Serial No.: 972780

Equipment No.: SA-01-09 — Sensitivity: 0.001 mg/m3

High Volume Sampler No.: A-01-03 — Before Sensitivity Adjustment: 739 CPM

Tisch Calibration Orifice No.: 3864 — After Sensitivity Adjustment: 739 CPM

Calibration of 1 hr TSP		
Calibration Point	**Laser Dust Monitor**	**HVS**
	Mass Concentration (µg/m3) **X-axis**	Mass concentration (µg/m^3) **Y-axis**
1	78.0	134.0
2	62.0	112.0
3	51.0	105.0
Average	**63.7**	**117.0**

By Linear Regression of Y on X

Slope , mw = **1.0958** **Intercept, bw =** **47.2315**

Correlation coefficient* = **0.9832**

Set Correlation Factor	
Particulate Concentration by High Volume Sampler (µg/m^3)	117.0
Particaulate Concentration by Dust Meter (µg/m^3)	63.7
Measuring time, (min)	60.0

Set Correlation Factor , SCF

SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] **1.8**

In-house method in according to the instruction manual:

The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler.

Those filter papers are weighted by HOKLAS laboratory (HPCT Limited)

Calibrated by: _____

Technical Officer (Wong Shing Kwai)

Approved by: _____

Project Manager (Henry Leung)

TISCH Environmental

RECALIBRATION DUE DATE:
January 7, 2027

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	January 7, 2026	**Rootsmeter S/N:** 438320	**Ta:** 294	°K
Operator:	Jim Tisch		**Pa:** 749.0	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **3864**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4310	3.2	2.00
2	3	4	1	1.0260	6.4	4.00
3	5	6	1	0.9150	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7200	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9947	0.6951	1.4135	0.9957	0.6958	0.8860
0.9905	0.9654	1.9990	0.9915	0.9663	1.2530
0.9885	1.0803	2.2349	0.9895	1.0814	1.4009
0.9873	1.1309	2.3440	0.9883	1.1320	1.4693
0.9819	1.3638	2.8270	0.9829	1.3652	1.7720
QSTD	**m=**	**2.11337**	**QA**	**m=**	**1.32336**
	b=	**-0.04919**		**b=**	**-0.03083**
	r=	**0.99993**		**r=**	**0.99993**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

Key
ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (°K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

Certificate of Calibration - Wind Monitoring Station

Description:	Yau Lai Estate, Bik Lai House
Manufacturer:	Davis Instruments
Model No.:	Davis7440
Serial No.:	MC01010A44
Equipment No.:	SA-03-04
Date of Calibration	17-Feb-2026
Next Due Date	17-Aug-2026

1. Performance check of Wind Speed

Wind Speed, m/s		Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 – V2
0.0	0.0	0.0
1.5	1.5	0.0
2.5	2.5	0.0
4.0	4.1	-0.1

2. Performance check of Wind Direction

Wind Direction (°)		Difference D (°)
Wind Direction Reading (W1)	Marine Compass Value (W2)	D = W1 - W2
0	0	0.0
90	90	0.0
180	180	0.0
270	270	0.0

Test Specification:

1. Performance Wind Speed Test - The wind meter was on-site calibrated against the anemometer

2. Performance Wind Direction Test - The wind meter was on-site calibrated against the marine compass at four direction

Calibrated by: _____ Wong Shing Kwai

Approved by: _____ Henry Leung

新創校正服務有限公司
New Creation Calibration Service Limited

Certificate of Calibration
校正證書

Certificate No. : C261130
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC26-0366) Date of Receipt / 收件日期 : 1 April 2026

Description / 儀器名稱 : Acoustical Calibrator
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 4231
Serial No. / 編號 : 2326353
Supplied By / 委託者 : Cinotech Consultants Limited
Room 1710, Technology Park, 18 On Lai Street,
Shatin, N.T. Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 3)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 14 April 2026

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed specified limits.
These limits refer to manufacturer's published tolerances as requested by the customer.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies

Tested By 測試 : C K Lo
Project Engineer

Certified By 核證 : K C Lee
Senior Engineer

Date of Issue 簽發日期 : 14 April 2026

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

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新創校正服務有限公司
香港九龍長沙灣青山道576-586號製衣中心11樓F及G室
Tel/電話: (852) 2736 3335 Fax/傳真: (852) 2736 3332 E-mail/電郵: callab@nccsvc.com.hk Website/網址: www.nccsvc.com.hk

Certificate of Calibration
校正證書

Certificate No. : C261130
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 1 hour before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL456	6 1/2 Digit Multimeter	SO219304-4
CL461	Sound Calibrator	CDK2502138

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Limit (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.9	± 0.2	± 0.2
114 dB, 1 kHz	113.9		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Limit	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. New Creation Calibration Service Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

New Creation Calibration Service Limited
Flat F & G, 11/F, Garment Centre, 576-586 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong
新創校正服務有限公司
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High Precision Chemical Testing Ltd.
Rm 1904, Technology Park
18 On Lai Street, Shatin
NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 01587 Issue Date : 8 Jun 2026
Application No. : HP01358

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-12-10

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	620249
Microphone No.	620753

Date Received : 5 Jun 2026

Test Period : 5 Jun 2026 to 8 Jun 2026

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

Chan Hon Fai
Laboratory Director

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

Report No. : 01587 Issue Date : 8 Jun 2026
Application No. : HP01358

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	114.2	+ 0.2	± 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.

- End of report -

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

Report No. : 01590 Issue Date : 12 Jun 2026
Application No. : HP01388

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-12-11

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	620258
Microphone No.	620749

Date Received : 12 Jun 2026

Test Period : 12 Jun 2026 to 12 Jun 2026

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

Chan Hon Fai
Laboratory Director

High Precision Chemical Testing Ltd.
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NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 01590 Issue Date : 12 Jun 2026
Application No. : HP01388

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	94.0	± 0.0	± 1.5
114.0	114.1	+ 0.1	± 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.

- End of report -

High Precision Chemical Testing Ltd.
Rm 1904, Technology Park
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Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 01602 Issue Date : 12 Jun 2026
Application No. : HP01389

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-12-12

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	620116
Microphone No.	620330

Date Received : 12 Jun 2026

Test Period : 12 Jun 2026 to 12 Jun 2026

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

Chan Hon Fai
Laboratory Director

High Precision Chemical Testing Ltd.
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NT, Hong Kong
Tel: +852 3841 4388 Website: https://www.hpct.com.hk

Report No. : 01602 Issue Date : 12 Jun 2026
Application No. : HP01389

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	94.0	± 0.0	± 1.5
114.0	114.1	+ 0.1	± 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.

- End of report -