

#### **Certificate of Calibration - Wind Monitoring Station**

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: Davis7440

Serial No.: <u>MC01010A44</u>

Equipment No.: SA-03-04

Date of Calibration <u>17-Aug-2024</u>

Next Due Date <u>17-Feb-2025</u>

#### 1. Performance check of Wind Speed

Wind Sp	peed, m/s	Difference D (m/s)
Wind Speed Reading (V1)	Anemometer Value (V2)	D = V1 - V2
0.0	0.0	0.0
1.5	1.6	-0.1
2.5	2.3	0.2
4.0	4.0	0.0

#### 2. Performance check of Wind Direction

Wind Di	rection (°)	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



# RECALIBRATION DUE DATE:

January 15, 2025

# Certificate of Calibration

**Calibration Certification Information** 

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294

°K

Operator: Jim Tisch

**Pa:** 755.4

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	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

		Data Tabula	tion		
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	$\sqrt{\Delta H (Ta/Pa)}$
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)
1.0031	0.6975	1.4195	0.9956	0.6924	0.8823
0.9989	0.9727	2.0075	0.9915	0.9655	1.2477
0.9968	1.0858	2.2444	0.9894	1.0778	1.3950
0.9956	1.1378	2.3539	0.9882	1.1294	1.4631
0.9903	1.3697	2.8390	0.9829	1.3595	1.7645
	m=	2.11196		m=	1.32248
<b>QSTD</b>	b=	-0.05043	QA	b=	-0.03134
	r=	0.99998	4 .	r=	0.99998

	Calculatio	ns	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/∆Time	Qa=	Va/ΔTime
	For subsequent flow ra	te calculatio	ns:
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	Qa=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrate	or manometer reading (in H2O)
ΔP: rootsme	ter manometer reading (mm Hg)
	solute temperature (°K)
Pa: actual ba	rometric 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

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# **High-Volume TSP Sampler**

#### 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0049

Project No.	AM1 - Tin Hau	Temple					
Date:	14-Aı	ıg-24	Next Due Date:	14-	Oct-24	Operator:	SK
Equipment No.:	A-0	1-05		G:		Serial No.	10599
			Ambient C	ondition			
Temperatu	re, Ta (K)	302.2	Pressure, Pa			754.8	
0 : 1	N		fice Transfer Star			. 1	0.05010
Serial  Last Calibra		3864 15-Jan-24	Slope, mc	0.05976 nc x Ostd + bo	Intercept $c = [\Delta H \times (Pa/760)]$		-0.05018
Next Calibra		13-Jan-24 14-Jan-25			$(Pa/760) \times (298/7)$		
			Calibration of T	ΓSP Sampler			
Calibration		Or	fice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	(0) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] <sup>1/2</sup> <b>'-axis</b>
1	13.2		3.60	61.01	8.7		2.92
2	10.4		3.19	54.24	6.4		2.50
3	7.5	,	2.71	46.19	4.4		2.08
5	5.3		2.28 1.74	38.96 30.00	2.8 1.5		1.66
Slope , mw = Correlation	coefficient < 0.99	0.	9994	Intercept, bw	-0.463	31	
			Set Point Ca	alculation			
From the Regres	eld Calibration C sion Equation, th et Point; $W = (m)$	e "Y" value acco			98/Ta)] <sup>1/2</sup>		
Remarks: Conducted by:	Wong Sh	ing Kwai	Signature:	K	<u></u>	Date: _	14-Aug-24
Checked by:	Henry	Leung	Signature:	-lem	y day	Date:	14-Aug-24

# **High-Volume TSP Sampler**

#### 5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0049

Project No.	AM2 - Sai Tso V	Van Recreation	Ground				
Date:	14-Aı	ıg-24	Next Due Date:	14-	Oct-24	Operator:	SK
Equipment No.:	quipment No.: A-01-08		Model No.:	G	S2310	Serial No.	1287
			Ambient C	Condition			
Temperatur	re, Ta (K)	302.2	Pressure, Pa			754.8	
		0	· · · · · · · · · · · · · · · · · · ·		-49		
Serial	No.	3864	Slope, mc	0.05976	Intercept	t. bc	-0.05018
Last Calibra		15-Jan-24		•	$c = [\Delta H \times (Pa/760)]$		
Next Calibra		14-Jan-25			(Pa/760) x (298/7		
	•						
			Calibration of	TSP Sampler			
Calibration		Or	fice	1		HVS	
Point	$\Delta H$ (orifice), in. of water	[ΔH x (Pa/76	(50) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] <sup>1/2</sup> 7 <b>-axis</b>
1	13.3		3.61	61.23	8.4		2.87
2	10.2		3.16	53.73	6.2		2.46
3	7.5		2.71	46.19	4.3		2.05
4	5.2		2.26	38.60	2.7		1.63
5	3.0		1.71	29.52	1.5		1.21
Slope, mw = Correlation C *If Correlation C			.9993	-	-0.375		
			Set Point C	alculation			
From the TSP Fig	eld Calibration C	urve, take Qstd					
From the Regress	sion Equation, th	e "Y" value acco	ording to				
		m.v. v. (	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W}]$	· (Do/760) ··· (20	10/Ta)1 <sup>1/2</sup>		
		IIIW X (	$\mathbf{y}\mathbf{s}\mathbf{t}\mathbf{u} + \mathbf{b}\mathbf{w} = \mathbf{L}\mathbf{\Delta}\mathbf{w} \mathbf{x}$	(Fa/700) X (2)	90/1a)]		
Therefore, Se	et Point; W = ( m	w x Qstd + bw)	<sup>2</sup> x ( 760 / Pa ) x ( '	Ta / 298) =	3.66		
Remarks:							
•							
•							
				10	- [		
Conducted by:	Wong Sh	ing Kwai	Signature:	\( \)		Date:	14-Aug-24
				1 -	y Xvoy	_	
Checked by:	Henry	Leung	Signature:	-lem	y don	Date:	14-Aug-24
			- -	7	1		

# **High-Volume TSP Sampler** 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0049

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	14-A	ug-24	Next Due Date:	14-	Oct-24	Operator:	SK
Equipment No.:	A-0	1-03			S2310		10379
			•				
	·		Ambient C	ondition			
Temperatu	re, Ta (K)	302.2	Pressure, Pa	(mmHg)		754.8	_
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	l No.	3864	Slope, mc	0.05976	Intercept	t, bc	-0.05018
Last Calibra		15-Jan-24			$c = [\Delta H \times (Pa/760)]$	/	
Next Calibr		14-Jan-25	1		(Pa/760) x (298/7		
	I		Calibration of	ΓSP Sampler			
Calibration	ATT ( 170 )	Or	fice	0.442=-		HVS	1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] <sup>1/2</sup>	Qstd (CFM) X - axis	ΔW (HVS), in. of water		(60) x (298/Ta)] <sup>1/2</sup> Y-axis
1	12.9		3.55	60.32	8.0		2.80
2	10.6		3.22	54.76	6.2		2.46
3	7.6		2.73	46.49	4.4		2.08
4	5.0		2.21	37.87	2.8		1.66
5	2.9		1.69	29.04	1.6		1.25
Slope , mw = Correlation	coefficient < 0.99		.9992	intercept, bw	-0.188	33	
			Set Point Ca	lculation			
From the Regres	teld Calibration Casion Equation, the telephone $\mathbf{E}_{\mathbf{r}}$	mw x Q			98/Ta)] <sup>1/2</sup>		
Remarks:  Conducted by:		ning Kwai	Signature:	\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\exiting{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texitin}\xint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\xint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\ti}\tittt{\text{\texitit{\text{\tin}\text{\text{\texitit{\text{\tex{\texi{\texi{\texi{\texi{\texi{\texi{\texi}\texi{\texit{\texi{\ti}\tinttit{\texi}\tittt{\ti}\tittt{\texitit}\\tiint{\t	M-	Date:	14-Aug-24
Checked by:	Henry	Leung	Signature:	\-lem	y Xon	Date:	14-Aug-24

# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/027 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Jul-24 Next Due Date: 4-Sep-24 Date: Operator: SK Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** 303.2 Temperature, Ta (K) Pressure, Pa (mmHg) 758.9 **Orifice Transfer Standard Information** 0.05976 Intercept, bc 3864 Slope, mc Serial No. -0.05018  $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd =  $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 14-Jan-25 Next Calibration Date: **Calibration of TSP Sampler** Orfice Calibration  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$  $\Delta H$  (orifice), Ostd (CFM)  $\Delta W$  (HVS), in.  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Point in. of water X - axis of water Y-axis 1 13.5 3.64 61.75 9.5 3.05 2.71 2 11.3 3.33 56.57 7.5 3.04 51.67 2.41 4 5.5 2.32 39.72 3.1 1.74 32.29 2.1 1.44 5 3.6 1.88 By Linear Regression of Y on X Slope , mw = 0.0551 Intercept, bw : -0.3959 Correlation coefficient\* = 0.9974 \*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 =  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 3.97$ Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung

# **High-Volume TSP Sampler**

#### 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/028 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Sep-24 Next Due Date: 4-Nov-24 Operator: SK Date: Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** Temperature, Ta (K) 302.7 Pressure, Pa (mmHg) 751.8 **Orifice Transfer Standard Information** 0.05976 Intercept, bc -0.05018 3864 Slope, mc Serial No. mc x Qstd + bc =  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd =  $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 14-Jan-25 **Calibration of TSP Sampler** Orfice HVS Calibration  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$  $\Delta H$  (orifice), Ostd (CFM)  $\Delta W$  (HVS), in. Point  $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 13.6 3.64 61.74 9.4 3.03 1 11.4 3.33 56.60 7.4 2.68 51.20 3.01 6.0 2.42 4 5.6 2.34 39.92 2.9 1.68 5 3.6 1.87 32.17 2.0 1.40 By Linear Regression of Y on X Slope , mw = 0.0562 Intercept, bw : -0.4760 Correlation coefficient\* = \*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 =  $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  3.87 Remarks: Signature: Date: 4-Sep-24

Signature: Date: 4-Sep-24 Conducted by: Wong Shing Kwai Checked by: Henry Leung



#### **Certificate of Calibration**

Tt is	certified that t	the item und	ler calibration b	nas heen	calibrated by	corresponding	calibrated High	Volume Sample
11 15	сеннестна г	ше пеш ша	ег санытанон г	Ias Deen	Cambrated by	COHESDOHUIII9	Cambrated migh	. voiime Jannoie

Description:	Laser Dust Mo	nitor			Date of	of Calibration	31-Jul-24
Manufacturer:	Sibata Scientif	ic Technology	y LTD.		Validity of Calibr	ation Record	30-Sep-24
Model No.:	LD-3B						
Serial No.:	2Y6194						
Equipment No.:	SA-01-02			Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.:	A-01-03	•	Before Sensi	tivity Adjustment	578	
Tisch Calibration	n Orifice No.:	3864		After Sensiti	vity Adjustment	578	
			Calibra	ntion of 1 hr T	SP		
Calibration		Laser Du	ıst Monitor			HVS	
Point	Total Count		Count / Minute	:	Mass	s concentration (µ	$\lg/m^3$ )
1	4000		X-axis			Y-axis	
2	4000 3600		75.0 65.0			142.0 121.0	
3	3000		55.0			101.0	
Aver	age		65.0			121.3	
By Linear Regr Slope , mw = Correla	2.05	00	0.99		rcept, bw =	-11.9167	<u>1</u>
Set Correlation I SCF = [ K=High		oler / Dust M	eter, (μg/m3)]		1.9		
(CF) between the	or was compared e Dust Monitor	l with a calib and High Vol	rated High Volur		d The result was use	ed to generate the	Correlation Factor
Calibrated by:	cal Officer (Wor	ng Shing Kwa	ni)		Approved by:	Project Manager	(Henry Leung)

Digital Dust Indicator



Date of Calibration 31-Jul-24

#### **Certificate of Calibration**

Description:

Manufacturer:	Sibata Scientific	c Technology LTD.	_	Validity of Calibr	ration Record	30-Sep-24
Model No.:	LD-5R					
Serial No.:	8Y2374					
Equipment No.:	SA-01-04		Sensitivity	0.001 mg/m3	_	
High Volume Sa	ampler No.:	A-01-03	Before Sensiti	vity Adjustment	652	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	652	
		Cal	libration of 1 h	r TSP		
Calibration	]	Laser Dust Monitor			HVS	
Point	Mas	ss Concentration (µg/1	m3)	Mas	ss concentration (µ	ug/m <sup>3</sup> )
		X-axis			Y-axis	
1		76.0			138.0	
2		66.0			121.0	
3 Average		56.0 <b>66.0</b>			102.0 <b>120.3</b>	
Tiverage	<u>I</u>	00.0			120.5	
	ession of Y on X	1				
Slope , mw = Correlation co	1.8000 pefficient* =	0.9995		cept, bw =	1.5333	
		0.9995			1.5333	
Correlation co	oefficient* =	0.9995	t Correlation F		1.5333	
Correlation co	oefficient* =	0.9995 Set	t Correlation F			
Correlation co	centration by Higherntration by Du	0.9995 Set gh Volume Sampler (	t Correlation F		120.3	
Particaulate Con Particaulate Con Measureing time Set Correlation F	ncentration by Hig accentration by Du e, (min)	0.9995 Set gh Volume Sampler (	t <b>Correlation F</b> μg/m³)		120.3 66.0	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High	ncentration by Hig ncentration by Du ncentration by Du ncentration by Du ncentration by Du ncentration by Du ncentration by Hig ncentration by Hig ncentration by Hig ncentration by Hig ncentration by Hig ncentration by Bu	<b>Set</b> gh Volume Sampler ( ust Meter (μg/m³)	t Correlation F μg/m³) g/m3) ]	actor	120.3 66.0	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	deentration by High elecentration by Dure, (min) Factor, SCF h Volume Sample I in according to the cor was compared eveen the Dust Mo	9.9995  Set gh Volume Sampler (  ast Meter (μg/m³)  bler / Dust Meter, (μg	t Correlation F μg/m³) g/m3) ] ul: gh Volume Samp me Sampler.	1.8 oler and The result	120.3 66.0 60.0	rate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw Those filter pap	centration by High centration by Dure, (min) Factor, SCF h Volume Sample or was compared eveen the Dust Motors are weighter	Set gh Volume Sampler (  st Meter (μg/m³)  bler / Dust Meter, (μg  the instruction manual with a calibrated High volume and High Volume and HOKLAS laborated by HOKLAS laborated HOKLAS laborate	t Correlation F μg/m³) g/m3) ] ul: gh Volume Samp me Sampler.	1.8 pler and The result Litimed) Approved by:	120.3 66.0 60.0	y Xvoy

Digital Dust Indicator



31-Jul-24

Date of Calibration

#### **Certificate of Calibration**

Description:

-						
Manufacturer:	Sibata Scient	ific Technology LTD.	Validity of Cali	bration Record	30-Sep-24	
Model No.:	LD-5R					
Serial No.:	8Y2373					
Equipment No.:	SA-01-05		Sensitivity 0.001 mg/m3	<u> </u>		
High Volume Sa	impler No.:	A-01-03	Before Sensitivity Adjustment	657		
Tisch Calibratio	n Orifice No.:	3864	After Sensitivity Adjustment	657		
		Ca	alibration of 1 hr TSP			
Calibration		Laser Dust Monito	r	HVS		
Point	N.	fass Concentration (μg	/m3) M	ass concentration (µ	ıg/m³)	
		X-axis		Y-axis		
1		75.0		136.0		
2		65.0		116.0		
3		56.0		100.0		
Average		65.3		117.3		
Slope , mw = Correlation co	1.89 pefficient* =	0.9994	Intercept, bw =	-6.5830		
		Se	et Correlation Factor			
Particaulate Con	centration by l	High Volume Sampler	$(\mu g/m^3)$	117.3		
Particaulate Con	centration by I	Dust Meter (μg/m <sup>3</sup> )		65.3		
Measureing time	e, (min)			60.0		
Set Correlation 1	Factor, SCF					
SCF = LK=Hig						
SCF - [ K-IIIg.	h Volume San	mpler / Dust Meter, (µ	ng/m3) ]1.	8		
		npler / Dust Meter, (μ to the instruction manu		8		
In-house method The Dust Monito Factor (CF) betw	I in according to or was compar- veen the Dust I	to the instruction manu ed with a calibrated Hi Monitor and High Volu	al: gh Volume Sampler and The resu		rate the Correlation	
In-house method The Dust Monito Factor (CF) betw Those filter pap	I in according to was compared the Dust I pers are weigh	to the instruction manu ed with a calibrated Hi Monitor and High Volu	al: gh Volume Sampler and The resume Sampler. oratory (HPCT Litimed)  Approved by	It was used to gener	y Mory	



#### **Certificate of Calibration**

Description:	Digital Dust Indicator		Date of Calibration	31-Jul-24
Manufacturer:	Sibata Scientific Technology LTD.	<u> </u>	Validity of Calibration Record	30-Sep-24
Model No.:	LD-5R			
Serial No.:	972777			
Equipment No.:	SA-01-06	Sensitivity	0.001 mg/m3	
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment 645	
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment 645	
	Ca	libration of 1 h	r TSP	
Calibration	Laser Dust Monitor	r	HVS	
Point	Mass Concentration (μg/	/m3)	Mass concentration (	$(\mu g/m^3)$
_	X-axis		Y-axis	
1	76.0		137.0	
3	66.0 56.0		118.0 100.0	
Average	66.0		118.3	
By Linear Regr	ression of V on X			
Dy Emean Regi	CSSION OF T ON A			
Slope, mw =	1.8500	Inter	cept, bw = -3.766	7
	1.8500		cept, bw = -3.766	7
Slope, mw =	1.8500 pefficient* = 0.9999	)		7
Slope , mw = Correlation co	1.8500 pefficient* = 0.9999 Se	et Correlation F	actor	7
Slope , mw = Correlation co	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (	et Correlation F		7
Slope , mw = Correlation co	1.8500  pefficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (µg/m³)	et Correlation F	actor 118.3	7
Slope , mw = Correlation co  Particaulate Con Particaulate Con	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Experiments (min)	et Correlation F	factor 118.3 66.0	7
Slope , mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Experiments (min)	et Correlation F (μg/m³)	factor 118.3 66.0	7
Slope , mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=High	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Expects (min)  Factor , SCF  The Volume Sampler / Dust Meter, (μ	et Correlation F (μg/m³) g/m3) ]	118.3 66.0 60.0	7
Slope, mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Exercise (min)  Factor , SCF	et Correlation F (μg/m³) g/m3) ]	118.3 66.0 60.0	
Slope, mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=High In-house method The Dust Monito Factor (CF) betw	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Exactor, SCF  The Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volume	g/m3) ]  al: gh Volume Sampler.	118.3 66.0 60.0 1.8  Deler and The result was used to general	
Slope, mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=High In-house method The Dust Monito Factor (CF) betw	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Expector, SCF  The Volume Sampler / Dust Meter, (μstruction manual or was compared with a calibrated High	g/m3) ]  al: gh Volume Sampler.	118.3 66.0 60.0 1.8  Deler and The result was used to general	
Slope, mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=High In-house method The Dust Monito Factor (CF) betw	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Exactor, SCF  The Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volume	g/m3) ]  al: gh Volume Sampler.	118.3 66.0 60.0 1.8  Deler and The result was used to general	
Slope, mw = Correlation co  Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=High In-house method The Dust Monito Factor (CF) betw	1.8500  Defficient* = 0.9999  Secontration by High Volume Sampler (centration by Dust Meter (μg/m³)  Exp. (min)  Factor , SCF  The Volume Sampler / Dust Meter, (μs)  I in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volumes are weighted by HOKLAS laboration.	g/m3) ]  al: gh Volume Sampler.	118.3 66.0 60.0 1.8 Deler and The result was used to general Litimed)	

Digital Dust Indicator



31-Jul-24

Date of Calibration

#### **Certificate of Calibration**

Description:

Manufacturer:	Sibata Scienti	ific Technology LTD.	Validity of Ca	alibration Record	30-Sep-24
Model No.:	LD-5R				
Serial No.:	972778				
Equipment No.:	SA-01-07		Sensitivity 0.001 mg/m	3	
High Volume Sa	impler No.:	A-01-03	Before Sensitivity Adjustmen	t	
Tisch Calibratio	n Orifice No.:	3864	After Sensitivity Adjustment	735 CPM	
		C	alibration of 1 hr TSP		
Calibration		Laser Dust Monito	r	HVS	
Point	M	Iass Concentration (μg	t/m3)	Mass concentration (	$\mu g/m^3$ )
		X-axis		Y-axis	
1		74.0		138.0	
2		64.0		120.0	
3		54.0		100.0	
Average		64.0		119.3	
	1.90	<del></del>	Intercept, bw =	-2.2667	<u> </u>
Correlation Co	oefficient* =	0.999	<u> </u>		
Correlation Co	oefficient* = _		et Correlation Factor		
	-		et Correlation Factor	119.3	
Particaulate Con	centration by I	S	et Correlation Factor	119.3 64.0	
Particaulate Con	ecentration by I	S High Volume Sampler	et Correlation Factor		
Particaulate Con Particaulate Con Measureing time Set Correlation I	acentration by I acentration by I e, (min) Factor, SCF	<b>S</b> High Volume Sampler Dust Meter (μg/m³)	et Correlation Factor (μg/m³)	64.0 60.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I	acentration by I acentration by I e, (min) Factor, SCF	S High Volume Sampler	et Correlation Factor (μg/m³)	64.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=Hig	acentration by Incentration	<b>S</b> High Volume Sampler Dust Meter (μg/m³)	et Correlation Factor (μg/m³)  ug/m3) ]	64.0 60.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig	ecentration by I ecentration by I e. (min) Factor, SCF h Volume San	S High Volume Sampler Dust Meter (μg/m³)  Impler / Dust Meter, (μ  In the instruction manual with a calibrated Hi	et Correlation Factor  (µg/m³)  ug/m3) ]  ual:  igh Volume Sampler and The re	64.0 60.0	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monite Factor (CF) betw	centration by Incentration by Incentration by Incentration by Incentration by Incentration, SCF  The Volume Same In according to the Court of the Co	S High Volume Sampler Dust Meter (μg/m³)  Inpler / Dust Meter, (μ  It to the instruction manual with a calibrated High Volume Sampler	et Correlation Factor  (µg/m³)  ng/m3)    nal:  igh Volume Sampler and The reume Sampler.	64.0 60.0	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig In-house method The Dust Monite Factor (CF) betw	centration by Incentration by Incentration by Incentration by Incentration by Incentration, SCF  The Volume Same In according to the Court of the Co	S High Volume Sampler Dust Meter (μg/m³)  Inpler / Dust Meter, (μ  It to the instruction manual with a calibrated High Volume Sampler	et Correlation Factor  (µg/m³)  ug/m3) ]  ual:  igh Volume Sampler and The re	64.0 60.0	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig In-house method The Dust Monite Factor (CF) betw	centration by Incentration by Incentration by Incentration by Incentration by Incentration, SCF  The Volume Same In according to the Court of the Co	S High Volume Sampler Dust Meter (μg/m³)  Inpler / Dust Meter, (μ  It to the instruction manual with a calibrated High Volume Sampler	et Correlation Factor  (µg/m³)  ng/m3)    nal:  igh Volume Sampler and The reume Sampler.	64.0 60.0	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monito Factor (CF) betw Those filter page	centration by Incentration by Incentration by Incentration by Incentration by Incentration by Incentration SCF  The Volume Sand in according to the Compare ween the Dust Moers are weight	S High Volume Sampler Dust Meter (μg/m³)  mpler / Dust Meter, (μ  to the instruction manual with a calibrated High Volume Sampler	et Correlation Factor  (µg/m³)  ug/m3) ]  ual:  igh Volume Sampler and The returne Sampler.  oratory (HPCT Litimed)	64.0 60.0  1.9  sult was used to gene	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monite Factor (CF) betw Those filter pap	recentration by Incentration by Incentration by Incentration by Incentration by Incentration, SCF in Volume Same In according to the Core was compared ween the Dust Incers are weight	S High Volume Sampler Dust Meter (μg/m³)  mpler / Dust Meter, (μ  to the instruction manual with a calibrated High Volume Sampler	et Correlation Factor (µg/m³)  ng/m3) ]  nal: igh Volume Sampler and The returne Sampler. oratory (HPCT Litimed)  Approved	64.0 60.0  1.9  sult was used to gene	-y Xvorz

Digital Dust Indicator



Date of Calibration 31-Jul-24

#### **Certificate of Calibration**

Description:

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Ιt	is certified th	nat the	item under	calibration	nas been	calibrated by	corresponding	calibrated High	Volume Sa	mbler

Manufacturer:	Sibata Scientific Technology LTD.	<u>_</u>	Validity of Calibr	ration Record	30-Sep-24
Model No.:	LD-5R				
Serial No.:	972780				
Equipment No.:	SA-01-09	Sensitivity	0.001 mg/m3	<u>-</u>	
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment	739 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment	739 CPM	
	Ca	alibration of 1 h	r TSP		
Calibration	Laser Dust Monito	r		HVS	
Point	Mass Concentration (μg	/m3)	Mas	ss concentration (	ug/m <sup>3</sup> )
	X-axis			Y-axis	
1	72.0			138.0	
3	62.0 52.0			118.0	
Average	62.0			100.0 118.7	
Slope, mw =	1.9000	interd	ept, bw =	0.8667	
Correlation co	pefficient* = 0.9995	5			
Correlation co	Defficient* = 0.9995	et Correlation F			
Correlation co	oefficient* = 0.9995 Secure tration by High Volume Sampler	et Correlation F		118.7	
Correlation co	Defficient* = 0.9995  Secure tration by High Volume Sampler transcentration by Dust Meter (μg/m³)	et Correlation F		118.7	
Correlation co	Defficient* = 0.9995  Second	et Correlation F		118.7 62.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I	Defficient* = 0.9995  Second	et Correlation F (μg/m³)		118.7 62.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High	Second S	et Correlation F (μg/m³)	actor	118.7 62.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=Hig	Secontration by High Volume Sampler (μg/m³)  c, (min)  Factor , SCF  h Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated Hi	et Correlation F (μg/m³)  ng/m3)    al: gh Volume Samp	actor	118.7 62.0 60.0	rate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monito Factor (CF) betw	Secretation by High Volume Sampler accentration by Dust Meter (μg/m³)  c, (min)  Factor , SCF  h Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated High Volume High Volume Normal High	et Correlation F (μg/m³)  ng/m3) ]  al: gh Volume Sampume Sampume Sampler.	1.9	118.7 62.0 60.0	rate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monito Factor (CF) betw	Secontration by High Volume Sampler (μg/m³)  c, (min)  Factor , SCF  h Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated Hi	et Correlation F (μg/m³)  ng/m3) ]  al: gh Volume Sampume Sampume Sampler.	1.9	118.7 62.0 60.0	rate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monito Factor (CF) betw	Secretation by High Volume Sampler accentration by Dust Meter (μg/m³)  c, (min)  Factor , SCF  h Volume Sampler / Dust Meter, (μ  I in according to the instruction manual or was compared with a calibrated High Volume High Volume Normal High	et Correlation F (μg/m³)  ng/m3) ]  al: gh Volume Sampume Sampume Sampler.	1.9 oler and The result Litimed)	118.7 62.0 60.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [ K=Hig  In-house method The Dust Monito Factor (CF) betw	Secontration by High Volume Sampler (μg/m³)  c, (min)  Factor , SCF  h Volume Sampler / Dust Meter, (μ  I in according to the instruction manuor was compared with a calibrated Hieronethe Dust Monitor and High Volumes are weighted by HOKLAS labely	et Correlation F (μg/m³)  ng/m3) ]  al: gh Volume Sampume Sampume Sampler.	1.9 oler and The result Litimed)	118.7 62.0 60.0	

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NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00736 Issue Date : 28 Jun 2024

Application No. : HP00592

**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-16-01

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information : Model No. AWA6021A

Serial No. 1023253

Date Received : 27 Jun 2024

Test Period : 28 Jun 2024 to 28 Jun 2024

Test Requested : Performance checking for Sound Level Calibrator

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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00736 | Issue Date : 28 Jun 2024

Application No. : HP00592

# **Certificate of Calibration**

Measuring equipment

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

Description	Sound Meter
Manufacturer	BSWA Technology
Model No.	BSWA 308
Serial No.	570183
Microphone No.	570605
Equipment No.	N-12-01

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 0.3
114.0	114.1	+ 0.1	± 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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Report No. : 00582 | Issue Date : 14 Feb 2024

Application No. : HP00451

**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-16-02

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information : Model No. AWA6021A

Serial No. 1023064

Date Received : 14 Feb 2024

Test Period : 15 Feb 2024 to 15 Feb 2024

Test Requested : Performance checking for Sound Level Calibrator

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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NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Application No. : HP00451

# **Certificate of Calibration**

Measuring equipment

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

Description	Sound Meter
Manufacturer	SVANTEK
Model No.	SVAN 977
Serial No.	92677
Microphone No.	10352
Equipment No.	N-14-01

Test Result

•

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.2	+ 0.2	± 0.3
114.0	114.2	+ 0.2	± 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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Report No. : 00583 | Issue Date : 16 Feb 2024

Application No. : HP00452

**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-08-07

Manufacturer: : SVANTEK

Other information : Model

Model No.	SVAN 957
Serial No.	21455
Microphone No.	17204

Date Received : 14 Feb 2024

Test Period : 15 Feb 2024 to 15 Feb 2024

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

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Report No. : 00583 | Issue Date : 16 Feb 2024

Application No. : HP00452

### **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	114.1	+ 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.

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Application No. : HP00514

**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

Model No.	BSWA 308
Serial No.	570183
Microphone No.	590073

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

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

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Report No. : 00647 Issue Date : 11 Apr 2024

Application No. : HP00514

### **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.

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Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00648 | Issue Date : 11 Apr 2024

Application No. : HP00515

**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-12-05

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580287
Microphone No.	570610

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00648 | Issue Date : 11 Apr 2024

Application No. : HP00515

# **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	114.1	+ 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.

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NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk



Report No. : 00618 Issue Date : 18 Mar 2024

Application No. : HP00473

**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-12-06

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	580156
Microphone No.	580804

Date Received : 06 Mar 2024

Test Period : 14 Mar 2024 to 14 Mar 2024

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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

Tel: +852 3841 4388 Website: https://www.hpct.com.hk

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Report No. : 00618 | Issue Date : 18 Mar 2024

Application No. : HP00473

# **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.