

Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

Model No.: <u>Davis7440</u>

Serial No.: MC01010A44

Equipment No.: SA-03-04

Date of Calibration <u>18-Feb-2024</u>

Next Due Date <u>18-Aug-2024</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	1.7	-0.2		
2.5 2.4		0.1		
4.0 3.8		0.2		

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		
180 180 270 270		0.0		
		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



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 Tabulation								
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				
QSTD	b=	-0.05043	QA	b=	-0.03134				
	r=	0.99998	4 1	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 rate calculations:						
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	Qa=	$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$				

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)				
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

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TOLL FREE: (877)263-7610 FAX: (513)467-9009

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0048

Project No.	AM1 - Tin Hau	Temple					
Date:	14-J	un-24	Next Due Date: 14-Aug-24		Operator:	SK	
Equipment No.:	A-0	1-05	Model No.:	GS2310		Serial No.	10599
			Ambient C	ondition			
Temperatur	re, Ta (K)	302.7	Pressure, Pa			753.1	
	, , , ,			<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	ntion Date:	15-Jan-24			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	14-Jan-25		$Qstd = \{ [\Delta H \ x] $	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / mo	:
			Calibration of T	TSP Sampler			
Calibration	ΔH (orifice),		fice	Oatd (CEM)	VATA (TANG)	HVS	0) - (200 /FL)1 ^{1/2}
Point	in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (HVS), in. of water		0) x (298/Ta)] ^{1/2} -axis
1	13.3		3.60	61.11	8.8		2.93
2	10.5		3.20	54.40	6.5	2	2.52
3	7.6		2.72	46.40	4.5	2	2.10
4	5.4		2.30	39.25	2.9	1	.68
5	3.2		1.77	30.41	1.7	1	.29
By Linear Regressions, mw = Correlation	0.0537 coefficient* =	0	.9986 calibrate.		-0.383	9	
			Set Point Ca	lculation			
From the Regress	sion Equation, th				98/Ta)] ^{1/2}		
Remarks:							
Conducted by:	Wong Sh	ning Kwai	Signature:	K	X on a	Date:	14-Jun-24
Checked by:	Henry	Leung	Signature:	\-lem	J Xon	Date:	14-Jun-24

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			GS2310		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)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/2} '-axis
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)] ^{1/2}		
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. MA16034/08/0048

Project No.	AM2 - Sai Tso	Wan Recreation					
Date:	14-Jun-24		Next Due Date: 14-		Aug-24	Operator:	SK
Equipment No.:	A-(01-08	Model No.:	GS	\$2310	Serial No.	1287
			Ambient C	Condition			
Temperatur	re, Ta (K)	302.7	Pressure, Pa	(mmHg)		753.1	
			ifice Transfer Star		I		0.07040
Serial		3864	Slope, mc	0.05976	$\frac{1}{1} + \mathbf{bc} = [\Delta \mathbf{H} \times (\mathbf{Pa}/760) \times (\mathbf{298/Ta})]^{1/2}$		
Last Calibra		15-Jan-24			$C = [\Delta H \times (Pa)/100]$ $(Pa/760) \times (298/100)$		
Next Calibra	ation Date:	14-Jan-25	<u> </u>	Qsia = { [Δ H x	(Fa/700) X (298/)	[a)] -DC}/II	iic
		•	Calibration of	TSP Sampler			
		Or	fice	151 Sampler		HVS	
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7	760) x (298/Ta)] ^{1/2} Y-axis
1	13.4		3.62	61.34	8.5		2.88
2	10.3		3.17	53.88	6.3		2.48
3	7.6		2.72	46.40	4.4		2.07
4	5.3		2.27	38.89	2.8		1.65
5	3.0		1.71	29.47	1.5		1.21
Slope, mw = Correlation C *If Correlation C	0.0528 coefficient* =		.9995	Intercept, bw =	-0.371	4	
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration	Curve, take Qstd					
From the Regress							
		mw x Q	$0\mathbf{s}\mathbf{t}\mathbf{d} + \mathbf{b}\mathbf{w} = [\mathbf{\Delta}\mathbf{W} \ \mathbf{x}]$	x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (r	mw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.70		
Remarks:							
•				h	a l		
Conducted by:	Wong S	hing Kwai	Signature:		<u> </u>	Date:	14-Jun-24
Checked by:	Henry	y Leung	Signature:	-lem	y Xon	Date:	14-Jun-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	14-Aug-24 Next Due Date: 14-Oct-24		Operator:	SK		
Equipment No.:	nent No.: A-01-		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	ΔH (orifice), in. of water	[ΔH x (Pa/76	(50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		50) x (298/Ta)] ^{1/2} 7 -axis
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 ^{1/2}		
		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)	² 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. MA16034/03/0048

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	14-J	un-24	Next Due Date:	14-Aug-24		Operator:	SK
Equipment No.:	A-0	01-03	Model No.:	GS	S2310	Serial No.	10379
			Ambient C	ondition			
Temperatu	re, Ta (K)	302.7	Pressure, Pa			753.1	
				(8)			
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05976	Intercept	t, bc	-0.05018
Last Calibration Date:		15-Jan-24	r	nc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$) x (298/Ta)] ¹	/2
Next Calibra	ation Date:	14-Jan-25	($\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}] \}$	(Pa/760) x (298/	Γa)] ^{1/2} -bc} / m	ıc
			Calibration of	TSP Sampler			
Calibration		Oı	fice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		60) x (298/Ta)] ^{1/2} /-axis
1	13.0		3.56	60.43	8.1		2.81
2	10.7		3.23	54.90	6.3		2.48
3	7.7		2.74	46.70	4.5		2.10
4	5.0		2.21	37.80	2.9		1.68
5	2.9		1.68	28.99	1.6		1.25
By Linear Regr Slope, mw = Correlation C	0.0489 coefficient* =	0	.9993	Intercept, bw	-0.172	7	
			Set Point Ca	alculation			
From the TSP Fi From the Regres Therefore, Se	sion Equation, t	he "Y" value acc			98/Ta)] ^{1/2} 3.81		
Remarks: Conducted by:		ning Kwai	Signature:	<u> </u>	X-2-5	Date: _	14-Jun-24
Checked by:	Henry	Leung	Signature:	tem	7 mg	Date:	14-Jun-24

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:		Oct-24	Operator:	SK
Equipment No.:	A-0	A-01-03 Model No.: GS2310				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	0.440		HVS	1/2
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		(60) x (298/Ta)] ^{1/2} 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	0	.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)] ^{1/2}		
Remarks: Conducted by:		ning Kwai	Signature:	\text{\tinit}\\ \text{\texit{\text{\texi}\text{\text{\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\texi}\text{\texititt{\text{\tin}\text{\texitit{\tex{\texi{\texi{\texi{\texi{\texi{\texi{\texi}\texi{\texit{\texi{\ti}\tinttit{\texi}\til\titt{\texi{\texi{\texi}\texit{\texi{\	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 $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (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



Certificate of Calibration

It 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 Calibration Record30-Sep-		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 ³)
		X-axis			Y-axis	
1		76.0			138.0	
2		66.0			121.0	
3 Average		56.0 66.0			102.0 120.3	
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 Correlation F 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	Set 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 Moders 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	Locar Duct Manitar		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 ³)		65.3			
Measureing time	e, (min)			60.0			
Set Correlation 1	Factor, SCF						
Set Correlation Factor, SCF SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] 1.8							
SCF - [K-IIIg.	h Volume San	npler / 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 Scienti	fic Technology LTD.	_	Validity of Calibr	ation 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.:	A-01-03	Before Sensiti	vity Adjustment	645	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	645	
		Cal	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	M	ass Concentration (μg/ι X-axis	m3)	Mas	s concentration (µ Y-axis	ıg/m³)
1		76.0			137.0	
2		66.0			118.0	
3		56.0			100.0	
Average		66.0		118.3		
	ession of Y on					
Slope , mw = Correlation co	1.850		Intere	cept, bw =	-3.7667	
- '	1.850	0.9999	Interd		-3.7667	_
Correlation co	1.850 pefficient* =	0.9999	t Correlation F		-3.7667 118.3	
Correlation co	1.850 pefficient* = centration by H centration by E	0.9999 Set	t Correlation F		118.3 66.0	
Particaulate Con Particaulate Con Measureing time	1.850 pefficient* = centration by Execution by Execut	0.9999 Set High Volume Sampler (t Correlation F		118.3	
Particaulate Con Particaulate Con Measureing time Set Correlation F	centration by Ecentration by Ecentra	0.9999 Set High Volume Sampler (t Correlation F μg/m³)		118.3 66.0	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High	1.850 pefficient* = centration by Experiments of the central centra	0.9999 Set High Volume Sampler (Oust Meter (μg/m³)	t Correlation F μg/m³) g/m3)]	actor	118.3 66.0	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by Ecentration by Ecentra	0.9999 Set High Volume Sampler (Dust Meter (μg/m³) apler / Dust Meter, (μg	t Correlation F μg/m³) g/m3)] tl: th Volume Sampler.	1.8 oler and The result	118.3 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	centration by Ecentration SCF in Volume Samular according to the School of the Ecentration by Ec	Set High Volume Sampler (Dust Meter (μg/m³) Appler / Dust Meter, (μg o the instruction manual and with a calibrated High Monitor and High Volume	t Correlation F μg/m³) g/m3)] tl: th Volume Sampler.	1.8 oler and The result	118.3 66.0 60.0	rate the Correlation

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	Colibration Laser Dust Monitor		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		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	S 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	S 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) Inpler / Dust Meter, (μ To the instruction manual with a calibrated H	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) 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 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) 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 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) 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 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 (Incentration & Sandal Incentration & Sandal In	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:

т.		4.41	. 1	1'1	1 1	121 . 1.1	1.	111 / 1 771 1	T 7 1 C	1
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		HVS		
Point	Mass Concentration (μg	/m3)	Mas	ss concentration (ug/m ³)
	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 the Dust Monitor and High Volume Normal Secretary (μ)	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 the Dust Monitor and High Volume Normal Secretary (μ)	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	



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C241168

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC24-0305)

Date of Receipt / 收件日期: 21 February 2024

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 / 温度 :

 $(23 \pm 2)^{\circ}$ C

Relative Humidity / 相對濕度 :

 $(50 \pm 25)\%$

Line Voltage / 電壓

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

3 March 2024

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:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Hottinger Brüel & Kjær Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies

- Fluke Everett Service Center, USA

Tested By 測試

H T Wong

Assistant Engineer

Certified By 核證

K/C Lee Engineer Date of Issue 簽發日期

Website/網址: www.suncreation.com

4 March 2024

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。



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C241168

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours 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

CL130 CL281

CL281 TST150A Description

Universal Counter

Multifunction Acoustic Calibrator

Measuring Amplifier

Certificate No.

C233799

CDK2302738 C221750

4. Test procedure: MA100N.

5. Results:

5.1 Sound Level Accuracy

UUT	Measured Value	Mfr's Limit	Uncertainty of Measured Value
Nominal Value	(dB)	(dB)	(dB)
94 dB, 1 kHz	93.90	± 0.2	± 0.20
114 dB, 1 kHz	114.00		

5.2 Frequency Accuracy

requestey recuracy			
UUT Nominal Value	Measured Value	Mfr's	Uncertainty of Measured Value
(kHz)	(kHz)	Limit	(Hz)
1	1 000 0	$1 \text{ kHz} \pm 0.1 \%$	+ 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. Sun Creation Engineering 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。

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

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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



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

Rm 1904, Technology Park 18 On Lai Street, Shatin

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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00419 | Issue Date : 22 Aug 2023

Application No. : HP00291

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 : Mo

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

Date Received : 14 Aug 2023

Test Period : 16 Aug 2023 to 16 Aug 2023

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



Application No. : HP00291

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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



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 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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



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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NT, Hong Kong

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Report No. : 00568 | Issue Date : 14 Feb 2024

Application No. : HP00436

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 : | N

Model No.	BSWA 308
Serial No.	570188
Microphone No.	570608

Date Received : 05 Feb 2024

Test Period : 07 Feb 2024 to 07 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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00568 | Issue Date : 14 Feb 2024

Application No. : HP00436

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	113.9	- 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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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.