

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.: <u>SA-03-04</u>

Date of Calibration <u>17-Feb-2025</u>

Next Due Date <u>17-Aug-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	1.4	0.1
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	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 7, 2026

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 7, 2025 Rootsmeter S/N: 438320 Ta: 293 °K

Operator: Jim Tisch Pa: 759.0 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	1.4590	3.2	2.00
2	3	4	1	1.0360	6.4	4.00
3	5	6	1	0.9160	8.0	5.00
4	7	8	1	0.8800	8.8	5.50
5	9	10	1	0.7270	12.7	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)			
1.0114	0.6932	1.4252	0.9958	0.6825	0.8787			
1.0071	0.9721	2.0156	0.9916	0.9571	1.2427			
1.0050	1.0971	2.2535	0.9895	1.0802	1.3893			
1.0039	1.1408	2.3635	0.9884	1.1232	1.4572			
0.9987	1.3737	2.8505	0.9833	1.3525	1.7574			
	m=	2.08969		m=	1.30853			
QSTD	b=	-0.02374	QA	b=	-0.01464			
	r=	0.99985	,	r=	0.99985			

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

Standard Conditions							
Tstd:	298.15 °K						
Pstd:	760 mm Hg						
	Key						
	ΔH: calibrator manometer reading (in H2O)						
	ter manometer reading (mm Hg)						
	solute temperature (°K)						
	arometric 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

FAX: (513)467-9009

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0053

Project No.	AM1 - Tin Hau	Temple					
Date:	14-Apr-25		Next Due Date:	14-Jun-25		Operator:	SK
Equipment No.:	A-0	01-05	Model No.:	G:	S2310	Serial No.	10599
	T		Ambient C				
Temperatur	re, Ta (K)	295.6	Pressure, Pa	(mmHg)		759.7	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05914	Intercept	t, bc	-0.02377
Last Calibra	ation Date:	7-Jan-25	r	nc x Qstd + bo	$c = [\Delta H \times (Pa/760]]$	$(298/Ta)^{1}$	/2
Next Calibra	ation Date:	7-Jan-26			(Pa/760) x (298/7		
			G 111 4 4 4 1	EGD G			
		0	Calibration of	ISP Sampler		TIX7C	
Calibration Point	ΔH (orifice),		fice 50) x (298/Ta)] ^{1/2}	Qstd (CFM)	ΔW (HVS), in.	HVS [ΔW x (Pa/7	760) x (298/Ta)] ^{1/2}
	in. of water			X - axis	of water	`	Y-axis
1	13.2		3.65	62.07	8.5		2.93
2	10.1		3.19	54.35	6.3		2.52
3	7.2		2.69	45.95	4.1		2.03
4	5.0		2.24	38.36	2.7		1.65
5	2.8		1.68	28.81	1.0		1.00
-	ression of Y on Y	X					
Slope, mw =		_		Intercept, bw :	-0.601	.9	
	coefficient* =		.9987	i			
*If Correlation C	Coefficient < 0.99	90, check and rec	calibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd	= 43 CFM				
From the Regres	sion Equation, th	ne "Y" value acco	ording to				
	·		_		1/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.43		
Remarks:							
Comarks.							
				X	》		
Conducted by:	Wong Sh	ning Kwai	Signature:	- (<i></i>	Date:	14-Apr-25
				10	N. 9. 17		
Checked by:	Henry	Leung	Signature:	Tem	7000/	Date:	14-Apr-25

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0053

Project No.	AM2 - Sai Tso V	Wan Recreation	Ground				
Date:	14-A	pr-25	Next Due Date:	14-	Jun-25	Operator:	SK
Equipment No.:	Equipment No.: A-01-		Model No.:	G	S2310	Serial No.	1287
			Ambient C	Condition			
Temperatur	re, Ta (K)	295.6	Pressure, Pa			759.7	
Carial	No		ifice Transfer Star	1		ha	0.02277
Serial Last Calibra		3864 7-Jan-25	Slope, mc	0.05914	Intercept $c = [\Delta H \times (Pa/760)]$		-0.02377
Next Calibra		7-Jan-25			$(Pa/760) \times (298/7)$		
Next Canora	ation Date.	7-Jan-20		<u> </u>	(1 a/ 700) X (270/ 1	(a) -bc/ m	
		•	Calibration of	TSP Sampler			
Colibration		Or	fice	•		HVS	
Calibration 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	13.2		3.65	62.07	8.5		2.93
2	10.1		3.19	54.35	6.1	,	2.48
3	7.5		2.75	46.89	4.0	,	2.01
4	5.2		2.29	39.11	2.5		1.59
5	3.1		1.77	30.29	1.5		1.23
Slope, mw = Correlation of *If Correlation C	coefficient* =	-	.9967	Intercept, bw : -	-0.479	00	
*II Correlation C	oemcient < 0.95	90, check and rec	canorate.				
			Set Point Ca	alculation			
From the TSP Fig From the Regress		_					
		mw x Q	$\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.41		
Remarks:							
				اء	-1		
Conducted by:	Wong Sh	ing Kwai	Signature:		<u> </u>	Date:	14-Apr-25
Checked by:	Henry	Leung	Signature:	-lem	y day	Date:	14-Apr-25

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0053

Project No.	AM3 - Yau Lai	Estate, Bik Lai l	House			_	
Date:	14-A	pr-25	Next Due Date:	:14-Jun-25		Operator:	SK
Equipment No.:	A-0	1-03	Model No.:	G	S2310	Serial No.	10379
			Ambient C	ondition			
Temperatur	re Ta (K)	295.6	Pressure, Pa		Ī	759.7	
Temperatur	ις, τα (π)	2)3.0	Tressure, Ta	(IIIIII Ig)		137.1	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05914	Intercept	t, bc	-0.02377
Last Calibra	ntion Date:	7-Jan-25			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	7-Jan-26		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / mo	2
			Calibration of	TSP Sampler	T		
Calibration	. TT / 101 \	O	rfice			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		0) x (298/Ta)] ^{1/2} -axis
1	13.1		3.63	61.84	8.3	2	2.89
2	10.0		3.17	54.08	6.3	2	2.52
3	7.4		2.73	46.58	4.1	2	2.03
4	5.0		2.24	38.36	2.4	1	1.56
5	3.2		1.80	30.77	1.4	1	1.19
By Linear Regr	ession of Y on X	K					
Slope, mw =		_]	Intercept, bw :	-0.564	13	
	coefficient* =	_	.9988	• /			
*If Correlation C	Coefficient < 0.99	90, check and red	calibrate.	•			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd					
From the Regress							
	-				1/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)]" ²		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	$x^2 \times (760 / Pa) \times (760 / Pa)$	Γa / 298) =	3.40		
Remarks:							
·							
				- 10	. 1		
Conducted by:	Wong St	ning Kwai	Signature:	X	<u> </u>	Date:	14-Apr-25
	,, ong bi			``	-	Suic.	1.11pt 20
Checked by:	Henry	Leung	Signature:	\-lem	y day	Date:	14-Apr-25

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/031 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 6-Mar-25 Next Due Date: 6-May-25 Date: Operator: SK Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** Temperature, Ta (K) 287.5 Pressure, Pa (mmHg) 764.8 **Orifice Transfer Standard Information** 0.05914 Intercept, bc 3864 Slope, mc -0.02377 Serial No. $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 7-Jan-25 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 7-Jan-26 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 3.75 63.85 9.1 3.08 7.2 2.74 2 11.0 3.39 57.68 9.1 3.08 52.50 5.6 2.42 4 5.1 2.31 39.40 2.6 1.65 1.9 5 3.8 1.99 34.07 1.41 By Linear Regression of Y on X Slope , mw = 0.0571 Intercept, bw : -0.5684 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = 3.42$ Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/032 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 6-May-25 Next Due Date: 6-Jul-25 Date: Operator: SK Model No.: TE 5170 Serial No. 1956 Equipment No.: A-01-55 **Ambient Condition** Temperature, Ta (K) 300.7 Pressure, Pa (mmHg) 759.1 **Orifice Transfer Standard Information** 0.05914 Intercept, bc 3864 Slope, mc -0.02377 Serial No. $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 7-Jan-25 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 7-Jan-26 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. Point $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ in. of water X - axis of water Y-axis 1 13.6 3.67 62.44 9.0 2.98 2 11.1 3.31 56.45 7.0 2.63 9.2 3.02 51.43 5.8 2.40 4 5.2 2.27 38.76 2.8 1.66 2.0 1.41 5 3.8 1.94 33.20 By Linear Regression of Y on X Intercept, bw :____ -0.4130 Slope , mw = 0.0543 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.73 Remarks: 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	1-Apr-25	
Manufacturer:	: Sibata Scientific Technology LTD.				Validity of Calibration Record 1-Jun-25			
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	ation of 1 hr T	SP			
Calibration		Laser Du	st Monitor			HVS		
Point	Total Count		Count / Minute	,	Mas	s concentration (µ	$\frac{1}{g/m^3}$	
			X-axis			Y-axis		
1	4000		74.0			140.0		
3	3600 3000		64.0 54.0			118.0		
Aver			64.0			119.3		
By Linear Regr Slope , mw = Correla	2.00	00	0.99		rcept, bw =	-8.6667		
Set Correlation Factor , SCF SCF = [K=High Volume Sampler / Dust Meter, (μ g/m3)] 1.9								
In-house method The Dust Monito (CF) between the Those filter pap	or was compared e Dust Monitor	l with a calibrand High Volu	ated High Volui ime Sampler.		d The result was use	ed to generate the	Correlation Factor	
Calibrated by:	cal Officer (Wor	ng Shing Kwa	i)		Approved by:	Project Manager	(Henry Leung)	



Certificate of Calibration

Description:	Digital Dust Indicator		Date of Calibration	1-Apr-25	
Manufacturer:	Sibata Scientific Technology LTD.		Validity of Calibration Record	1-Jun-25	
Model No.:	LD-5R				
Serial No.:	8Y2374				
Equipment No.:	SA-01-04	Sensitivity	0.001 mg/m3		
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensit	ivity Adjustment 652		
Tisch Calibratio	n Orifice No.: 3864	After Sensitiv	rity Adjustment 652		
	C	alibration of 1	nr TSP		
Calibration	Laser Dust Monito		HVS		
Point	Mass Concentration (μg X-axis	g/m3)	Mass concentration (Y-axis	ug/m³)	
1	76.0		134.0		
2	64.0		121.0		
3	52.0		103.0		
Average	64.0		119.3		
Slope , mw = Correlation co	1.2917 Defficient* = 0.995		ccept, bw =		
		et Correlation	Factor		
	centration by High Volume Sampler	$(\mu g/m^3)$	119.3		
	centration by Dust Meter (μg/m ³)		64.0		
Measureing time			60.0		
Set Correlation I	Factor , SCF h Volume Sampler / Dust Meter, (¡	.a/m2) 1	1.0		
SCF - [K-Hig.	n volume Sampler / Dust Meter, (p	ig/iii3) j	1.9		
In-house method	l in according to the instruction manu	ıal:			
	<u>*</u>	-	npler and The result was used to gene	rate the Correlation	
	veen the Dust Monitor and High Vol	_	TI (timed)		
rnose mier pap	pers are weighted by HOKLAS lab	oratory (HPC)	Liumea)		
Calibrated by:		_		J Xvo J	
Technic	al Officer (Wong Shing Kwai)		Project Manager (Henry	y*Leung)	



Certificate of Calibration

Description:	Digital Dust Indicator		Date of Calibration 1-Apr-25			
Manufacturer:	Sibata Scienti	fic Technology LTD.		Validity of Calibra	tion Record	1-Jun-25
Model No.:	LD-5R					
Serial No.:	8Y2373					
Equipment No.:	SA-01-05		Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.:	A-01-03	Before Sensiti	vity Adjustment	657	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	657	
		Ca	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	M	ass Concentration (μg/ X-axis	(m3)	Mass	concentration (µ Y-axis	g/m ³)
1		72.0			133.0	
2		62.0			115.0	
3		57.0			102.0	
Average		63.7			116.7	
Slope , mw =	2.028	36	Interd	cept, bw =	-12.4857	
Correlation co	oefficient* =	0.9953		_		
Correlation co	oefficient* =		t Correlation F	actor		
	-		t Correlation F	actor	116.7	
Particaulate Con	centration by I	Se	t Correlation F	actor	63.7	
Particaulate Con Particaulate Con Measureing time	centration by I centration by I	Se High Volume Sampler (t Correlation F	actor		
Particaulate Con Particaulate Con Measureing time Set Correlation F	centration by I centration by I , (min) Factor , SCF	Se High Volume Sampler (t Correlation F (μg/m³)	actor	63.7	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High	centration by I centration by I , (min) Factor , SCF h Volume Sam	Se High Volume Sampler (Oust Meter (μg/m ³)	t Correlation F (µg/m³) g/m3)]		63.7	
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by I centration by	Se High Volume Sampler (Dust Meter (μg/m³)	t Correlation F (µg/m³) g/m3)] al: gh Volume Sampme Sampler.	1.8 oler and The result v	63.7	ate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation F SCF = [K=Higl In-house method The Dust Monito Factor (CF) betw Those filter pap Calibrated by:	centration by F centration by E centration by	Se High Volume Sampler (Dust Meter (μg/m³) Appler / Dust Meter, (με to the instruction manual with a calibrated High Monitor and High Volu	t Correlation F (µg/m³) g/m3)] al: gh Volume Sampme Sampler.	1.8 Dier and The result v Litimed) Approved by:	63.7	y Over



Certificate of Calibration

Description:	Digital Dust Indicator		Date of Calibrati	on 1-Apr-25
Manufacturer:	Sibata Scientific Technology LTD.		Validity of Calibration Reco	rd 1-Jun-25
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.: <u>3864</u>	After Sensitivi	ty Adjustment 645	
	Ca	alibration of 1 h	r TSP	
Calibration	Laser Dust Monito		HV	
Point	Mass Concentration (μg X-axis	(/m3)	Mass concentra Y-ax	
1	74.0		131	
2	62.0		115	
3	51.0		103	.0
Average	62.3		116.3	
Slope , mw = Correlation co	1.2191 pefficient* = 0.9984		cept, bw =40	0.3401
	S	et Correlation F	actor	
Particaulate Con	Secentration by High Volume Sampler		actor	.3
Particaulate Con	centration by High Volume Sampler centration by Dust Meter (µg/m³)			
Particaulate Con Measureing time	centration by High Volume Sampler centration by Dust Meter (µg/m³), (min)		116	3
Particaulate Con Measureing time Set Correlation I	centration by High Volume Sampler centration by Dust Meter (µg/m³), (min)	(μg/m³)	116 62.:	3
Particaulate Con Measureing time Set Correlation F SCF = [K=High	centration by High Volume Sampler centration by Dust Meter (µg/m³), (min)	(μg/m³) ug/m3)]	62. 60.	3
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by High Volume Sampler centration by Dust Meter (µg/m³), (min) Factor, SCF h Volume Sampler / Dust Meter, (µ	ug/m³) ug/m3)] ual: ugh Volume Samplume Sampler.	116 62. 60. 1.9 pler and The result was used to	3
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by High Volume Sampler centration by Dust Meter (µg/m³), (min) Factor, SCF Nolume Sampler / Dust Meter, (µ in according to the instruction manual or was compared with a calibrated High Volume Sampler bust Monitor and High Volumes are weighted by HOKLAS lab	ug/m³) ug/m3)] ual: ugh Volume Samplume Sampler.	116 62. 60. 1.9 pler and The result was used to	3

Digital Dust Indicator



Date of Calibration 1-Apr-25

Certificate of Calibration

Description:

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ration Record	1-Jun-25
Model No.:	LD-5R					
Serial No.:	972778					
Equipment No.:	SA-01-07		Sensitivity	0.001 mg/m3	_	
High Volume Sa	mpler No.:	A-01-03	Before Sensitiv	vity Adjustment	735 CPM	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	735 CPM	
		Cal	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	N.	Iass Concentration (μg/1	m3)	Mas	ss concentration (ug/m ³)
		X-axis			Y-axis	
1		78.0			140.0	
3		65.0 55.0			118.0 105.0	
Average		66.0			121.0	
Slope , mw = Correlation co	1.53 pefficient* =	0.9974	Interd	ept, bw =	20.0150	<u>) </u>
		Set	t Correlation F	actor		
Particaulate Con	centration by I	High Volume Sampler ($\mu g/m^3$)	121.0		
Particaulate Con	centration by l	Dust Meter (μg/m ³)		66.0		
Measureing time	, (min)				60.0	
Set Correlation F SCF = [K=Higl		npler / Dust Meter, (με	g/m3)]	1.8		
In-house method	in according t	to the instruction manua	վ:			
Factor (CF) betw	een the Dust l	ed with a calibrated Hig Monitor and High Volu Ited by HOKLAS labo	me Sampler.		was used to gene	rate the Correlation
Calibrated by:		ml.	_	Approved by:	\-len	y day
Technica	al Officer (Wo	ng Shing Kwai)		Projec	et Manager (Henry	y Leung)

Digital Dust Indicator



Date of Calibration 1-Apr-25

Certificate of Calibration

Description:

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Caliba	ration Record	1-Jun-25
Model No.:	LD-5R					
Serial No.:	972780					
Equipment No.:	SA-01-09		Sensitivity	0.001 mg/m3	_	
High Volume Sa	mpler No.:	A-01-03	Before Sensitiv	vity Adjustment	739 CPM	
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	739 CPM	
		Cal	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	N	Iass Concentration (μg/s	m3)	Mas	ss concentration (ug/m ³)
		X-axis			Y-axis	
1		74.0			138.0	
3		62.0 56.0			115.0 100.0	
Average		64.0			117.7	
Slope , mw = Correlation co	2.08 pefficient* =	0.9976		ept, bw =	-15.666	<u></u>
		Se	t Correlation F	actor		
Particaulate Con	centration by l	High Volume Sampler ($(\mu g/m^3)$		117.7	
Particaulate Con	centration by l	Dust Meter (μg/m ³)		64.0		
Measureing time	· · · · · · · · · · · · · · · · · · ·				60.0	
Set Correlation I SCF = [K=Higl		npler / Dust Meter, (με	g/m3)]	1.8		
In-house method	in according t	to the instruction manua	al:			
Factor (CF) between	een the Dust I	ed with a calibrated Hig Monitor and High Volu ated by HOKLAS labo	me Sampler.		was used to gene	rate the Correlation
Calibrated by:		M.	_	Approved by:	-lem	y Xon
Technica	al Officer (Wo	ng Shing Kwai)			et Manager (Henry	/

Digital Dust Indicator



1-Apr-25

Date of Calibration

Certificate of Calibration

Description:

-						-
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calib	ration Record	1-Jun-25
Model No.:	LD-5R					
Serial No.:	972781					
Equipment No.:	SA-01-10		Sensitivity	0.001 mg/m3	_	
High Volume Sa	mpler No.:	A-01-03	Before Sensitiv	ity Adjustment	734 CPM	
Tisch Calibration	n Orifice No.:	3864	After Sensitivit	y Adjustment	734 CPM	
		Ca	llibration of 1 hr	TSP		
Calibration		Laser Dust Monitor	r		HVS	
Point	N.	fass Concentration (μg/	/m3)	Mas	ss concentration (µ	ug/m ³)
		X-axis			Y-axis	
1		77.0			134.0	
2		65.0			115.0	
3		58.0			101.0	
Average		66.7			116.7	
Slope , mw = Correlation co	1.72 pefficient* =	0.9980		ept, bw =	1.9856	
		Se	et Correlation Fa	nctor		
Particaulate Con	centration by I	High Volume Sampler	(μg/m ³)		116.7	
Particaulate Con	centration by I	Dust Meter (μg/m ³)		66.7		
Measureing time	e, (min)			60.0		
Set Correlation I	Factor, SCF					
SCF = [K=Hig	h Volume San	npler / Dust Meter, (μ	g/m3)]	1.8		
In-house method	in according t	to the instruction manua	al:			
The Dust Monito	or was compar	ed with a calibrated Hig	gh Volume Samp	ler and The result	was used to gener	ate the Correlation
		Monitor and High Volu	=			
Those filter pap	ers are weigh	ted by HOKLAS labo	oratory (HPCT)	Litimed)		
Calibrated by:		M.	_	Approved by:	-lem	y day
_		ong Shing Kwai)	_	Projec	ct Manager (Henry	Leung)

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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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NT, Hong Kong

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Report No. : 01015 Issue Date : 04 Feb 2025

Application No. : HP00868

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 : 28 Jan 2025

Test Period : 03 Feb 2025 to 04 Feb 2025

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. : 01015 Issue Date : 04 Feb 2025

Application No. : HP00868

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	114.3	+ 0.3	± 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. : 00870 | Issue Date : 14 Oct 2024

Application No. : HP00731

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-08-12

Manufacturer: : SVANTEK

Other information :

Model No.	SVAN 957
Serial No.	23851
Microphone No.	22391

Date Received : 07 Oct 2024

Test Period : 09 Oct 2024 to 09 Oct 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



Application No. : HP00731

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	114.2	+ 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

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



Report No. : 00871 Issue Date : 14 Oct 2024

Application No. : HP00732

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-12-02

Manufacturer: : BSWA Technology

Other information :

Model No.	BSWA 308
Serial No.	570187
Microphone No.	590079

Date Received : 07 Oct 2024

Test Period : 09 Oct 2024 to 09 Oct 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

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Application No. : HP00732

Certificate of Calibration

Measuring equipment

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

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	93.9	- 0.1	± 1.5
114.0	113.7	- 0.3	± 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. : 01074 Issue Date : 19 Mar 2025

Application No. : HP00912

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-03

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 17 Mar 2025

Test Period : 18 Mar 2025 to 18 Mar 2025

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. : 01074 Issue Date : 19 Mar 2025

Application No. : HP00912

Certificate of Calibration

Measuring equipment

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

Test Result

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

Note

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

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Report No. : 01075 Issue Date : 19 Mar 2025

Application No. : HP00913

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Integrating Sound Level Meter.

Equipment No.: : N-12-04

Manufacturer: : BSWA Technology

Other information : M

Model No.	BSWA 308
Serial No.	580238
Microphone No.	570605

Date Received : 17 Mar 2025

Test Period : 18 Mar 2025 to 18 Mar 2025

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. : 01075 Issue Date : 19 Mar 2025

Application No. : HP00913

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	94.2	+ 0.2	± 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.