

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		
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



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

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Date of Calibration 17-Aug-2025

Next Due Date 17-Feb-2026

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	1.5	0.0		
2.5 2.4		0.1		
4.0	3.9	0.1		

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

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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	√∆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= r=	-0.01464			
	r=	0.99985			0.99985			

Calculations							
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(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b $	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: calibrate	or manometer reading (in H2O)				
ΔP: rootsmeter manometer reading (mm Hg)					
Ta: actual absolute temperature (°K)					
Pa: actual barometric pressure (mm Hg)					
b: intercept					
m: slope					

RECALIBRATION

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

FAX: (513)467-9009

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0054

Project No.	AM1 - Tin Hau	Temple					
Date:	13-J	un-25	Next Due Date:	13-2	Aug-25	Operator:	SK
Equipment No.:	A-0	01-05	Model No.:	GS	S2310	Serial No.	10599
			Ambient C	Condition			
Temperatur	re, Ta (K)	300.5	Pressure, Pa			754.4	
			ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05914	Intercept		-0.02377
Last Calibra	ation Date:	7-Jan-25			$c = [\Delta H \times (Pa/760)]$		
Next Calibra	ation Date:	7-Jan-26		$Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	[a)] 1/2 -bc} / m	c
			Calibration of	TCD Complex			
		Ο	Calibration of r	1SP Sampler		HVS	
Calibration Point	ΔH (orifice), in. of water		60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/76	(50) x (298/Ta)] ^{1/2} (-axis
1	13.1		3.59	61.12	8.4	,	2.88
2	10.2		3.17	53.98	6.2	,	2.47
3	7.1		2.64	45.10	4.0		1.98
4	5.1		2.24	38.29	2.6		1.60
5	2.7		1.63	27.97	1.3		1.13
By Linear Regr Slope, mw = Correlation of *If Correlation C	0.0530 coefficient* =		.9989	Intercept, bw =	-0.389	1	
			Set Point C	alculation			
From the TSP Fi From the Regres Therefore, Se	sion Equation, t	he "Y" value acc		`	98/Ta)] ^{1/2}		
Remarks: Conducted by:	Wong Sl	ning Kwai	Signature:		√ -	Date:	13-Jun-25
Checked by:	Henry	Leung	Signature:	- tem	y way	Date:	13-Jun-25



File No. MA16034/05/0055

Project No.	AM1 - Tin Hau	Temple					
Date:	13-A	ug-25	Next Due Date:	13-	Oct-25	Operator:	SK
Equipment No.:	A-0	1-05			S2310		10599
			Ambient C	ondition			
Temperatur	re, Ta (K)	303.1	Pressure, Pa	(mmHg)		754.3	
		Or	ifice Transfer Star	ndard Informa	ntion		
Serial	l No.	3864	Slope, mc	0.05914	Intercept	t, bc	-0.02377
Last Calibra	ation Date:	7-Jan-25	r	nc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$) x (298/Ta)]	1/2
Next Calibra	ation Date:	7-Jan-26			(Pa/760) x (298/7		
	<u> </u>		Calibration of	TSP Sampler		TTTO	
Calibration	ΔH (orifice),		rfice	Oatd (CEM)	AW (IIVC) :	HVS	760) ** (200/T-)1 ^{1/2}
I UIII	in. of water	[ΔH x (Pa/76	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	Δ W (HVS), in. of water		760) x (298/Ta)] ^{1/2} Y-axis
1	13.0		3.56	60.63	7.8		2.76
2	10.0		3.12	53.22	5.8		2.38
3	7.0		2.61	44.59	3.8		1.93
4	5.0		2.21	37.75	2.5		1.56
5	2.6		1.59	27.33	1.3		1.13
Slope , mw = Correlation		0	.9988	intercept, bw	-0.267	75	
			Set Point Ca	lculation			
From the Regres	eld Calibration C sion Equation, the	mw x (, -		
Remarks:	et rolle, w = (in	w x Qsiu + ow)	\(\lambda(\)\(\)\(\)\(\)	147 270)	3.37		
Conducted by:	Wong Sh	ing Kwai	Signature:	<i>(</i> 2)	<u></u>	Date:	13-Aug-25
Checked by:	Henry	Leung	Signature:	-lem	y day	Date:	13-Aug-25



File No. MA16034/08/0054

Project No.	AM2 - Sai Tso	Wan Recreation	Ground			_	
Date:	13-J	un-25	Next Due Date:	13-2	Aug-25	Operator:	SK
Equipment No.:	A-0	1-08	Model No.:	GS	GS2310		1287
	Ī		Ambient C				
Temperatu	re, Ta (K)	300.5	Pressure, Pa	(mmHg)		754.4	
		Or	ifice Transfer Sta	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05914	Intercept	t, bc	-0.02377
Last Calibra	ation Date:	7-Jan-25	1	mc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$) x (298/Ta)] ^{1/}	2
Next Calibra	ation Date:	7-Jan-26			(Pa/760) x (298/7		
	ı		Calibration of	TSP Sampler			
Calibration		Oı	rfice	T		HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/70	50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		60) x (298/Ta)] ^{1/2} 7-axis
1	13.3		3.62	61.58	8.3		2.86
2	10.3		3.18	54.24	6.4		2.51
3	7.7		2.75	46.95	4.2		2.03
4	5.0		2.22	37.92	2.4		1.54
5	3.4		1.83	31.34	1.2		1.09
	coefficient* =	-	.9987	Intercept, bw =	-0.721	0	
*If Correlation C	Coefficient < 0.99	90, check and re	calibrate.				
			Set Point C	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd	= 43 CFM				
From the Regres	sion Equation, tl	ne "Y" value acc	ording to				
		mw x ($Qstd + bw = [\Delta W]x$	x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.31		
Remarks:							
				1.	1		
Conducted by	Wong Sł	ning Kwai	Signature:	X	<u>}</u>	Date:	13-Jun-25
	,, ong bi				, ~	Date.	10 0001 20
Checked by:	Henry	Leung	Signature:	-lem	y Xoy	Date:	13-Jun-25



File No. MA16034/08/0055

Project No.	AM2 - Sai Tso V	Van Recreation	Ground				
Date:	13-Aı	ıg-25	Next Due Date:	13-	Oct-25	Operator:	SK
Equipment No.:	To.: A-01-08 Model No.: GS2310		S2310	Serial No.	1287		
			Ambient C	Condition			
Temperatur	re, Ta (K)	303.1	Pressure, Pa			754.3	
Serial	No	3864	Slope, mc	ndard Informa 0.05914	Ation Intercept	t he	-0.02377
Last Calibra		7-Jan-25			$c = [\Delta H \times (Pa/760]]$		
Next Calibra		7-Jan-26			$(Pa/760) \times (298/7)$		
		•	•			/1 /	
			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		50) x (298/Ta)] ^{1/2} '-axis
1	13.5		3.63	61.77	8.4		2.86
2	10.5		3.20	54.53	6.5		2.52
3	7.8		2.76	47.05	4.3		2.05
4	5.2		2.25	38.49	2.5		1.56
5	3.5		1.85	31.65	1.4		1.17
Slope, mw = Correlation of *If Correlation C	coefficient* =		.9993	- -	-0.628		
			Set Point C	alculation			
From the TSP Fig From the Regress		e "Y" value acco		z (Pa/760) v (29	98/Ta)1 ^{1/2}		
Therefore, Se	t Point; W = (m		² x (760 / Pa) x ('				
Remarks:							
Checked by:			Signature:	1 0	X. X	Date:	13-Aug-25
Checked by:	Henry	Leung	Signature:	Tem	7000/	Date:	13-Aug-25



File No. MA16034/03/0054

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	13-J	un-25	Next Due Date:	13-2	Aug-25	Operator:	SK
Equipment No.:	A-(01-03	Model No.:	GS	S2310	Serial No.	10379
	I		Ambient C		<u> </u>		
Temperatu	re, Ta (K)	300.5	Pressure, Pa	(mmHg)		754.4	
		Or	ifice Transfer Star	ndard Informe	ation		
Serial	No.	3864	Slope, mc	0.05914	Intercept	i, be	-0.02377
Last Calibra	ation Date:	7-Jan-25		nc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$	x (298/Ta)]	1/2
Next Calibra	ation Date:	7-Jan-26			(Pa/760) x (298/7		
	ı		Calibration of	TSP Sampler			
Calibration		Oı	fice	Г		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		760) x (298/Ta)] ^{1/2} Y-axis
1	13.0		3.58	60.89	8.4		2.88
2	10.1		3.15	53.72	6.1		2.45
3	7.3		2.68	45.73	4.2		2.03
4	5.2		2.26	38.66	2.3		1.50
5	3.1		1.75	29.94	1.3		1.13
D 11 D		•					
By Linear Regr		X	•	[44]	0.722		
. ,	0.0575 coefficient* =	_	.9973	intercept, bw =	-0.633	3	
		90, check and red		•			
ii conclution c	occincient (0.)	50, eneck and rev	ouriorate.				
			Set Point Ca	alculation			
From the TSP Fi	ield Calibration	Curve, take Qstd	= 43 CFM				
From the Regres	sion Equation, t	he "Y" value acc	ording to				
			$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Da/760) v (20	00/Ta)1 ^{1/2}		
		IIIW X Q	įstu i bw – įΔw x	(1 a//00) x (2)	70/1 a) _]		
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.43		
Remarks:							
				1.0	. 1		
Conducted by:	Wong S	hing Kwai	Signature:	χ'	<u> </u>	Date:	13-Jun-25
J						· -	-
Checked by:	Henry	Leung	Signature:	-lem	y day	Date:	13-Jun-25



File No. MA16034/03/0055

Project No.	AM3 - Yau Lai	Estate, Bik Lai	House			<u>-</u>	
Date:	13-A	ug-25	Next Due Date:	13-	Oct-25	Operator:	SK
Equipment No.:	A-0	01-03	Model No.: GS2		S2310	Serial No.	10379
			Ambient C	Condition			
Temperatur	re, Ta (K)	303.1	Pressure, Pa			754.3	
Caria1	N.		rifice Transfer Sta	1	I	. h.a	0.02277
Serial Last Calibra		3864 7-Jan-25	Slope, mc	0.05914	Intercept $c = [\Delta H \times (Pa/760)]$		-0.02377
Next Calibra	The state of the s	7-Jan-25 7-Jan-26			$(Pa/760) \times (298/7)$		
ricat Canon	ation Date.			Q514 ([211 A	(1 u/ 100) A (200)	(((((((((((((((((((
			Calibration of	TSP Sampler			
Calibration		0	rfice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/7	[ΔH x (Pa/760) x (298/Ta)] ^{1/2}		ΔW (HVS), in. of water		0) x (298/Ta)] ^{1/2} -axis
1	13.2		3.59	61.09	8.5	2	2.88
2	10.3		3.17	54.01	6.2	2	2.46
3	7.4		2.69	45.84	4.0	1	.98
5	5.5 3.3		2.32 1.79	39.57 30.74	2.5 1.4		.17
	0.0574 coefficient* = Coefficient < 0.99		0.9981	Intercept, bw = -	-0.644	15	
			Set Point C	alculation			
From the Regres	eld Calibration (sion Equation, the sion Equation, the sion Equation) the sion of the sion	ne "Y" value acc		`	98/Ta)] ^{1/2}		
Remarks: Conducted by:	Wong Sl	ning Kwai	Signature:		<u></u>	Date:	13-Aug-25
Checked by:	Henry	Leung	Signature:	-lem	y Xoy	Date:	13-Aug-25



File No. MA20003/55/033 CKL 2 - Flat 103 Cha Kwo Ling Village Project No. 4-Jul-25 Next Due Date: 4-Sep-25 Date: Operator: SK Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** Temperature, Ta (K) 303.8 Pressure, Pa (mmHg) 754.1 **Orifice Transfer Standard Information** 0.05914 Intercept, bc 3864 Slope, mc -0.02377 Serial No. mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ 7-Jan-25 Last Calibration Date: Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 7-Jan-26 **Calibration of TSP Sampler** Orfice Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ ΔH (orifice), Ostd (CFM) ΔW (HVS), in. $[\Delta H \ x \ (Pa/760) \ x \ (298/Ta)]^{1/2}$ Point in. of water X - axis of water Y-axis 2.98 1 13.4 3.61 61.47 9.1 11.2 7.2 2 3.30 56.23 2.65 9.3 3.01 51.27 2.31 4 5.1 2.23 38.07 2.6 1.59 5 3.7 2.0 1.90 32.49 1.40 By Linear Regression of Y on X Slope , mw = 0.0551 Intercept, bw = -0.4575 Correlation coefficient* = 0.9969 *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 = $(\text{mw x Qstd} + \text{bw})^2 \times (760 / \text{Pa}) \times (\text{Ta} / 298) =$ 3.76 Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung



Certificate of Calibration

Τt	is certified	I that the	item under	calibration	has been	calibrated by	corresponding	calibrated High	Volume Samn	1er
ıι	. IS CELUITEU	ı mai mc	item unaci	Cambranon	nas occn	cambrated by	Corresponding	Cambrated Inight	volume Samb	ICI

Description:	Laser Dust Mo	nitor			Date of	f Calibration	30-Jul-25
Manufacturer:	Sibata Scientif	ic Technolog	LTD.		Validity of Calibra	tion Record	30-Sep-25
Model No.:	LD-3B						
Serial No.:	2Y6194						
Equipment No.:	SA-01-02			Sensitivity	0.001 mg/m3		
High Volume Sa	ampler No.:	A-01-03		Before Sensi	ivity Adjustment	578	
Tisch Calibratio	n Orifice No.:	3864		After Sensitiv	vity Adjustment	578	
			Calibra	tion of 1 hr T	SP		
Calibration		Laser Du	ıst Monitor			HVS	
Point	Total Count		Count / Minute X-axis		Mass	concentration (µ Y-axis	ıg/m³)
1	4000		76.0			143.0	
2	3600		64.0			115.0	
3	3000		53.0			104.0	
Avei	rage		64.3			120.7	
By Linear Regr Slope, mw =	ression of Y on 1.70			Inter	cept, bw =	10.9597	
Correl	ation coefficien	t* =	0.97	56			
Set Correlation l SCF = [K=Hig		bler / Dust M	eter, (μg/m3)		1.9		
(CF) between the	or was compared e Dust Monitor	l with a calib and High Vol		_	The result was used	d to generate the	Correlation Factor
Calibrated by: Techni	cal Officer (Wor	ng Shing Kwa	ni)			Project Manager	, ,

Digital Dust Indicator



30-Jul-25

Date of Calibration

Certificate of Calibration

Description:

-						
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ration Record	30-Sep-25
Model No.:	LD-5R					
Serial No.:	8Y2374					
Equipment No.:	SA-01-04		Sensitivity	0.001 mg/m3	<u>-</u>	
High Volume Sa	impler No.:	A-01-03	Before Sensitiv	vity Adjustment	652	
Tisch Calibratio	n Orifice No.:	3864	After Sensitivi	y Adjustment	652	
		Ca	libration of 1 hi	· TSP		
Calibration		Laser Dust Monitor	•		HVS	
Point	N.	fass Concentration (μg/	(m3)	Mass concentration (μg/m ³)		
		X-axis		Y-axis		
1		76.0			130.0	
2		67.0			122.0	
3		52.0			103.0	
Average		65.0			118.3	
Slope , mw = Correlation co		0.9962		ept, bw =	44.2687	<u>'</u>
		Se	t Correlation F	actor		
Particaulate Con	centration by I	High Volume Sampler ($(\mu g/m^3)$	118.3		
Particaulate Con	centration by I	Dust Meter (μg/m³)			65.0	
Measureing time	e, (min)				60.0	
Set Correlation 1	Factor, SCF					
SCF = [K=Hig	h Volume San	npler / Dust Meter, (μ	g/m3)]	1.8		
In-house method	l in according t	to the instruction manua	al:			
Factor (CF) betw	veen the Dust I	ed with a calibrated Hig Monitor and High Volu	me Sampler.		was used to gene	rate the Correlation
i nose tilter par	oers are weigh	nted by HOKLAS labo	oratory (HPCT)	Litimea)		
Calibrated by		ong Shing Kwai)	_	Approved by:	len et Manager (Henr	y X
	(5 5 ,		·J	υ (,	, 5,

Digital Dust Indicator



30-Jul-25

Date of Calibration

Certificate of Calibration

Description:

Τt	is certified that	the it	em under	calibration	has been	calibrated by	v corresponding	g calibrated High	Volume Samr	əler
ıι	is certified that	пис п	ciii unaci	cambianon	Has Deeli	cambrated by	y corresponding	g cambiated ingl	i voiume Same	JICI

3.f. C .						
Manufacturer:	Sibata Scientif	fic Technology LTD.	Valid	ty of Calibration	Record	30-Sep-25
Model No.:	LD-5R					
Serial No.:	8Y2373					
Equipment No.:	SA-01-05		Sensitivity 0.00	1 mg/m3		
High Volume Sa	mpler No.:	A-01-03	Before Sensitivity Ad	justment	657	
Tisch Calibratio	n Orifice No.:	3864	After Sensitivity Adju	stment	657	
		Ca	alibration of 1 hr TSP			
Calibration		Laser Dust Monito	r		HVS	
Point	Ma	ass Concentration (µg	/m3)	Mass concentration (μg/m ³)		
		X-axis		Y-axis		
1		72.0			133.0	
2		64.0			114.0	
3	56.0			101.0		
Average		64.0			116.0	
Slope , mw = Correlation co	2.000 pefficient* =	0.9942	Intercept, by		-12.0000	
		Se	et Correlation Factor			
Particaulate Con	centration by H	Seligh Volume Sampler	_		116.0	
	· ·		_		116.0 64.0	
	centration by D	ligh Volume Sampler	_			
Particaulate Con	e, (min)	ligh Volume Sampler	_		64.0	
Particaulate Con Measureing time Set Correlation I	centration by D c, (min) Factor , SCF	ligh Volume Sampler	(μg/m³)	1.8	64.0	
Particaulate Con Measureing time Set Correlation 1 SCF = [K=Hig	e, (min) Factor , SCF h Volume Sam	ligh Volume Sampler Oust Meter (μg/m ³)	(μg/m³) g/m3)]	1.8	64.0	
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito	centration by D c, (min) Factor, SCF h Volume Samp I in according to or was compared	ligh Volume Sampler Oust Meter (μg/m³) pler / Dust Meter, (μ the instruction manu d with a calibrated Hi	(μg/m³) g/m3)] al: gh Volume Sampler and		64.0	the Correlation
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito Factor (CF) betw	centration by D c, (min) Factor, SCF h Volume Sam I in according to or was compared ween the Dust M	Pust Meter (μg/m³) pler / Dust Meter, (μ the instruction manu d with a calibrated Hi fonitor and High Volu	g/m3)] al: gh Volume Sampler and time Sampler.	The result was u	64.0	the Correlation
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito Factor (CF) betw	centration by D c, (min) Factor, SCF h Volume Sam I in according to or was compared ween the Dust M	Pust Meter (μg/m³) pler / Dust Meter, (μ the instruction manu d with a calibrated Hi fonitor and High Volu	(μg/m³) g/m3)] al: gh Volume Sampler and	The result was u	64.0	the Correlation
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito Factor (CF) betw	centration by D c, (min) Factor, SCF h Volume Sam I in according to or was compared ween the Dust M	Pust Meter (μg/m³) pler / Dust Meter, (μ the instruction manu d with a calibrated Hi fonitor and High Volu	g/m3)] al: gh Volume Sampler and time Sampler.	The result was u	64.0	the Correlation
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito Factor (CF) betw Those filter pap	centration by D c, (min) Factor, SCF h Volume Samp I in according to or was compared ween the Dust M pers are weight	Pust Meter (μg/m³) pler / Dust Meter, (μ the instruction manu d with a calibrated Hi fonitor and High Volu	g/m3)] al: gh Volume Sampler and time Sampler. oratory (HPCT Litime)	The result was u	64.0 60.0	
Particaulate Con Measureing time Set Correlation I SCF = [K=Hig In-house method The Dust Monito Factor (CF) betw Those filter pap Calibrated by:	centration by D c, (min) Factor, SCF h Volume Samp I in according to or was compared ween the Dust M pers are weight	pler / Dust Meter, (μ the instruction manu d with a calibrated Hi fonitor and High Volu ted by HOKLAS labe	g/m3)] al: gh Volume Sampler and time Sampler. oratory (HPCT Litime)	The result was u d) pproved by:	64.0	Dog



Certificate of Calibration

Description:	Digital Dust I	ndicator		Date	of Calibration	30-Jul-25
Manufacturer:	Sibata Scienti	fic Technology LTD.	_	Validity of Calib	ration Record	30-Sep-25
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 Sensit	vity Adjustment	645	
Tisch Calibration	n Orifice No.:	3864	After Sensitiv	ity Adjustment	645	
		Cal	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	M	ass Concentration (μg/1	m3)	Mas	ss concentration (µ	ug/m³)
1		76.0			Y-axis	
2		56.0			135.0 115.0	
3	52.0				108.0	
Average	61.3				119.3	
Classic	1 00	47	T., 4	4 1 1	53 00 <i>(</i> 5	,
Slope , mw = Correlation co		0.9954	Inter	cept, bw =	52.8065	
- '		0.9954	Inter	-	52.8065	
Correlation co	oefficient* = _	0.9954	t Correlation I	-	119.3	
Correlation co	centration by E	0.9954 Set	t Correlation I	-	119.3 61.3	
Particaulate Con Particaulate Con Measureing time	centration by Ecentration Economic E	0.9954 Set High Volume Sampler (t Correlation I	-	119.3	
Particaulate Con Particaulate Con Measureing time Set Correlation F	centration by Ecentration by Ecentra	0.9954 Set High Volume Sampler (t Correlation I μg/m³)	-	119.3 61.3	
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 Ecentration by Ecentration by Ecentration by Ecentration by Ecentration SCF by Volume Same and in according to the Core was compared to the Dust Montre Survey of the Survey Scientific Scienti	0.9954 Set High Volume Sampler (Oust Meter (μg/m³)	t Correlation I μg/m³) g/m3)] gl: gh Volume Samme Sampler.	1.9	119.3 61.3 60.0	
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 Ecentration by Ecentration by Ecentration by Ecentration by Ecentration by Ecentration SCF h Volume Same in according to be acc	O.9954 Set High Volume Sampler (Oust Meter (μg/m³) Appler / Dust Meter, (μg on the instruction manual and with a calibrated High Monitor and High Volumes.	t Correlation I μg/m³) g/m3)] gl: gh Volume Samme Sampler.	1.9 pler and The result Litimed) Approved by:	119.3 61.3 60.0	rate the Correlation



Certificate of Calibration

Description:	Digital Dust Indicator		Date of Calibration 30-Jul-		
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ation Record	30-Sep-25
Model No.:	LD-5R				
Serial No.:	972778				
Equipment No.:	SA-01-07	Sensitivity	0.001 mg/m3		
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment	735 CPM	
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment	735 CPM	
	Cai	libration of 1 h	r TSP		
Calibration	Laser Dust Monitor			HVS	
Point	Mass Concentration (μg/: X-axis	m3)	Mass concentration (μg/m³) Y-axis		
1	75.0			141.0	
2	63.0			118.0	
3	52.0		105.0		
Average	63.3		121.3		
-	ression of Y on X	Interd	cept, bw =	21.8665	
	Se	t Correlation F	actor		
	centration by High Volume Sampler ($\mu g/m^3$		121.3	
	centration by Dust Meter (µg/m³)		63.3		
	Measureing time, (min)				
Vat ('orralation				60.0	
	Factor , SCF h Volume Sampler / Dust Meter, (με	g/m3)]	1.9	60.0	
SCF = [K=Hig	Factor, SCF		1.9	60.0	
SCF = [K=Hig In-house method The Dust Monito	Factor, SCF h Volume Sampler / Dust Meter, (µg l in according to the instruction manual or was compared with a calibrated Hig	ıl: gh Volume Samj			ate the Correlation
SCF = [K=High In-house method The Dust Monito Factor (CF) betw	Factor, SCF h Volume Sampler / Dust Meter, (µg	ıl: gh Volume Samj me Sampler.	oler and The result		ate the Correlation
In-house method The Dust Monite Factor (CF) betw Those filter pap	Factor, SCF h Volume Sampler / Dust Meter, (µµ l in according to the instruction manual or was compared with a calibrated High ween the Dust Monitor and High Volum bers are weighted by HOKLAS laborated	ıl: gh Volume Samj me Sampler.	oler and The result Litimed) Approved by:		y Over

Digital Dust Indicator



Date of Calibration 30-Jul-25

Certificate of Calibration

Description:

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ation Record	30-Sep-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/1	m3)	Mass concentration (μg/m³)		
1		X-axis		Y-axis		
2		76.0 62.0			134.0	
3		56.0			100.0	
Average	64.7		115.7			
Slope , mw = Correlation co	1.66 pefficient* =	0.9958	Interc	ept, bw =	8.0253	
		Set	t Correlation F	actor		
Particaulate Con	centration by l	High Volume Sampler ($\mu g/m^3$)		115.7	
	•	Oust Meter (μg/m ³)			64.7	
Measureing time	· · · ·				60.0	
Set Correlation F SCF = [K=Higl		npler / Dust Meter, (μg	g/m3)]	1.8		
In-house method	in according t	to the instruction manua	ıl:			
Factor (CF) betw	een the Dust I	ed with a calibrated Hig Monitor and High Volunted by HOKLAS labo	me Sampler.		was used to gene	rate the Correlation
Calibrated by:	::::	bl.	_	Approved by:	-lem	y Xoy
Technica	al Officer (Wo	ng Shing Kwai)		Projec	et Manager (Henr	Leung)

Digital Dust Indicator



30-Jul-25

Date of Calibration

Certificate of Calibration

Description:

-							
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calib	ration Record	30-Sep-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	rity Adjustment	734 CPM		
Tisch Calibration	n Orifice No.:	3864	After Sensitivit	y Adjustment	734 CPM		
		Ca	libration of 1 hr	TSP			
Calibration		Laser Dust Monitor			HVS		
Point	M	fass Concentration (μg/	m3)	Mass concentration (μg/m³)			
		X-axis			Y-axis		
1		75.0			132.0		
2		66.0			115.0		
3	55.0		101.0				
Average		65.3			116.0		
Slope , mw = Correlation co		99 0.9936		ept, bw =	15.3953		
		Se	t Correlation Fa	ictor			
Particaulate Con	centration by I	High Volume Sampler ($(\mu g/m^3)$		116.0		
Particaulate Con	centration by I	Dust Meter (μg/m ³)			65.3		
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	l in according t	to the instruction manua	al:				
Factor (CF) betw	veen the Dust I	ed with a calibrated Hig Monitor and High Volu Ited by HOKLAS labo	me Sampler.		was used to gener	rate the Correlation	
Calibrated by:		ong Shing Kwai)	_	Approved by: Projec	Ct Manager (Henry	Leung)	

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NT, Hong Kong

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Report No. : 00964 | Issue Date : 30 Dec 2024

Application No. : HP00820

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.

Model No.	AWA6021A
Serial No.	1023253

Date Received : 27 Dec 2024

Test Period : 30 Dec 2024 to 30 Dec 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

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Report No. : 00964 | Issue Date : 30 Dec 2024

Application No. : HP00820

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	94.3	+ 0.3	± 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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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.

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

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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

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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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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

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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

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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 : Model No

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.