High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0045

Project No.	AM1 - Tin Hau	Temple				-	
Date:	12-D	Dec-23	Next Due Date:	12-	Feb-24	Operator:	SK
Equipment No.:	A-0	1-05	Model No.:	o.: GS2310		Serial No.	10599
				71			
Tamananatu	To (V)	207.7	Ambient C			762.2	
Temperatu	re, 1a (K)	297.7	Pressure, Pa	(mmHg)		762.2	
		Or	ifice Transfer Star	ndard Informa	ation		
Seria	l No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491
Last Calibra	ation Date:	16-Jan-23			$c = [\Delta H \times (Pa/760]]$		
Next Calibration Date: $ 16-Jan-24 \qquad \qquad \mathbf{Qstd} = \{ [\Delta \mathbf{H} \times (\mathbf{Pa}/760) \times (\mathbf{298/Ta})]^{1/2} - \mathbf{bc} \} / \mathbf{mc} $							
			Calibration of	ΓSP Sampler	T		
Calibration	alibration Orfice		fice			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		0) x (298/Ta)] ^{1/2} •axis
1	13.0		3.61		9.0	3	.01
2	10.3		3.22		6.7	2	59
3	7.3		2.71		4.8	2	20
4	5.3		2.31		2.8	1	.68
5	2.9		1.71 29.37 1.5		1.5	1	.23
Ry Linear Regi	ression of Y on Y	Z					
Slope, mw =		-]	ntercept, bw :	-0.449	98	
	coefficient* =	- 0	.9970	1 /			
*If Correlation (Coefficient < 0.99	90, check and rec	calibrate.				
			Set Point Ca	alculation			
From the TSP F	ield Calibration (Curve, take Qstd					
	ssion Equation, th						
			N 4 I . I . FASS	(D. 15(0) (2)	NO/TE \11/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa//60) x (29	98/1a)]		
Therefore, Se	et Point; W = (m	nw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.81		
Remarks:							
Conducted by	Wong Cl	ina Vivoi	Cianatura	X	<u> </u>	Dotai	12 Dag 22
Conducted by:	Wong Sh	mig K wai	Signature:		X 29 27	Date:	12-Dec-23
Chaoland by	Henry	Leung	Signature:	-lem	y Dong	Date:	12-Dec-23

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0046

Project No.	AM1 - Tin Hau	Temple				_	
Date:	14-F	Seb-24	Next Due Date:		Apr-24	Operator:	SK
Equipment No.:	A-0	01-05	Model No.:	GS2310		Serial No.	10599
			Ambient C	ondition			
Temperatur	re, Ta (K)	294	Pressure, Pa			765.2	
•	, , ,		,				
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc				-0.05018
Last Calibration Date: $15-Jan-24 \qquad \qquad \mathbf{mc} \times \mathbf{Qstd} + \mathbf{bc} = [\Delta \mathbf{H} \times (\mathbf{Pa}/760) \times (\mathbf{298/Ta})]^{1/2}$							
Next Calibra	ation Date:	14-Jan-25		$Qstd = \{ [\Delta H \ x]$	(Pa/760) x (298/7	Ta)] ^{1/2} -bc} / mc	:
			Calibration of T	ISP Sampler		TTT	
Calibration Point	ΔH (orifice), in. of water		ffice 60) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water		0) x (298/Ta)] ^{1/2}
1	12.8		3.61	61.32	8.8		5.00
2	10.1		3.21		6.5	2	58
3	7.2		2.71	46.20	4.6	2	17
4	5.2		2.30		2.7	1	.66
5	2.8		1.69	29.13	1.3	1	.15
	0.0577 coefficient* =	<u> </u>	.9982 calibrate.		-0.551	13	
English TCD E	-1.1 C-13b (i)	C (-1 O-(1	Set Point Ca	liculation			
		Curve, take Qstd ne "Y" value acco mw 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) =	3.65	<u> </u>	
Remarks:							
Conducted by:	Wong Sl	ning Kwai	Signature:	K	火-	Date:	14-Feb-24
Checked by:	Henry	Leung	Signature:	-lem	Jan	Date:	14-Feb-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0045

Project No.	AM2 - Sai Tso V	Wan Recreation	Ground				
Date:	te: 12-Dec-23 uipment No.: A-01-08		Next Due Date: 12-F		Feb-24	Operator:	SK
Equipment No.:			Model No.:	GS2310		Serial No.	1287
			Ambient C	Condition			
Temperatur	re, Ta (K)	297.7	Pressure, Pa			762.2	
		0	·e·	1 11 6	4*		
Serial	No.	3864	Slope, mc	0.05928	Intercept	t, bc	-0.03491
	Last Calibration Date: 16-Jan-23			mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date: $16 - \text{Jan} - 24$ Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc \} / mc$							
	•						
			Calibration of	TSP Sampler			
Calibration		Oı	fice	T		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	13.1		3.63	61.76	8.7		2.96
2	10.2		3.20	54.57	6.4		2.53
3	7.4		2.73	46.57	4.5		2.13
4	5.1		2.26	38.76	3.0	1.74	
5	2.9		1.71	29.37	1.5		1.23
Slope, mw = Correlation *If Correlation C	coefficient* =		.9997	-	-0.323		
			Set Point C	alculation			
From the TSP Fi	eld Calibration C	Curve, take Qstd					
From the Regress		_					
				(D. /5(0) (2)	NO/TE \11/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	x (Pa//60) x (29	98/1a)]		
Therefore, Se	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (′	Γa / 298) =	3.77		
Remarks:							
							_
Conducted by:	Wong Sh	ing Kwai	Signature:	X	<u></u>	Date:	12-Dec-23
		-		1 0	~ X27		
Checked by:	Henry	Leung	Signature:	tem	Just -	Date:	12-Dec-23

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0046

Project No.	AM2 - Sai Tso V	Van Recreation	Ground			·	
Date:	14-Fe	eb-24	Next Due Date: 14		Apr-24	Operator:	SK
Equipment No.:	ent No.: A-01-08		Model No.:	G	S2310	Serial No.	1287
			Ambient C	Condition			
Temperatur	re, Ta (K)	294	Pressure, Pa			765.2	
		On	ifice Transfer Sta	ndard Informs	ation .		
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	T		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	13.0		3.64	61.79	8.6		2.96
2	10.0		3.19	54.30	6.3		2.54
3	7.4		2.75	46.83	4.4		2.12
4	5.0		2.26	38.64	2.8	1.69	
5	2.8		1.69	29.13	1.4		1.20
Correlation o			alibrate.	-			
			Set Point C	alculation			
From the TSP Fig	eld Calibration C	urve_take Ostd		alculation			
From the Regress		_					
	— 1 ,						
		mw x ($\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	x (Pa/760) x (29	98/Ta)] ^{1/2}		
Therefore, Se	et Point; W = (m	w x Qstd + bw)	² x (760 / Pa) x (′	Ta / 298) =	3.65		
							_
.							
Remarks:							
Conducted by:	Wong Sh	ing Kwai	Signature:	X	2	Date:	14-Feb-24
Conducted by.	wong an	ing ixwai	Signature.		<i>,</i> ~	Date	17-1 CU-24
Checked by	Henry	Leung	Signature:	\-l.	y Xon	Date:	14-Feb-24
	110.111		. 23	1			

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0045

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	12-De	Dec-23 Next Due Date: 12-Feb-24		Operator:	SK		
Equipment No.:	No.: A-01-03 Model No.: GS2310		S2310	Serial No.	10379		
			•				
			Ambient C	ondition			
Temperatur	re, Ta (K)	297.7	Pressure, Pa	(mmHg)		762.2	
0 : 1	N.		ifice Transfer Star			, 1	0.02401
Serial No. Last Calibration Date:		3864	Slope, mc	0.05928	Intercept		-0.03491
Next Calibra		16-Jan-23 16-Jan-24	mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Qstd = $\{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} \cdot bc\} / mc$				
Next Calibra	mon Date.	10-Jan-24			(1 a/ 700) X (270/ 1	(a)j -bc//11	
		•	Calibration of T	TSP Sampler			
Calibration Orfice				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		760) x (298/Ta)] ^{1/2} Y-axis
1	12.9	3.60		61.30	8.5		2.92
2	10.6	3.26		55.62	6.5		2.55
3	7.8		2.80	47.79	4.6		2.15
4	5.0	2.24		38.38	2.9		1.71
5	3.0		1.74 29.86		1.7		1.31
By Linear Regre	ossion of V on V	-					
Slope, mw =		L	1	ntercent hw :	-0.232	9	
Correlation of		- 0	.9983	intercept, sw	0,202		
*If Correlation C				,			
		,					
			Set Point Ca	lculation			
From the TSP Fig	eld Calibration C	Curve, take Qstd	= 43 CFM				
From the Regress	sion Equation, th	e "Y" value acco	ording to				
		mw v C	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) v (20	18/Ta)] ^{1/2}		
		IIIW X Q	įstu + DW – įΔW A	(1 a/ /00) X (2)	76/1 <i>a)</i>]		
Therefore, Se	t Point; W = (m	w x Qstd + bw)	2 x (760 / Pa) x (7	Γa / 298) =	3.77		
Remarks:							
Conducted by:	Wong Sh	ing Kwai	Signature:	X	<u></u>	Date:	12-Dec-23
	., ong pii	<i>3 3</i>		``	N. m. 1		30 20
Checked by:	Henry	Leung	Signature:	\-lem	7 Dong	Date:	12-Dec-23

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0046

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House					
Date:	14-Feb-24		Next Due Date:		Apr-24	Operator:	SK	
Equipment No.: A-0		1-03			S2310		10379	
			Ambient C	ondition				
Temperatu	re, Ta (K)	294	Pressure, Pa			765.2		
•	•							
		Or	ifice Transfer Star	ndard Informa	ntion			
Serial	l No.	3864	Slope, mc	0.05976	Intercept	ept, bc -0.05018		
Last Calibration Date: 15-Jan-24		15-Jan-24	1	nc x Qstd + bo	$c = [\Delta H \times (Pa/760]]$) x (298/Ta)] ^{1/}	2	
Next Calibr	ation Date:	14-Jan-25		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	c	
	1		Calibration of	TSP Sampler				
Calibration		Or	fice			HVS	1./0	
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	12.8		3.61	61.32	8.4	2.93		
2	10.5		3.27	55.62	6.4	2.56		
3	7.7		2.80	47.75	4.5	2.14		
4	4.9		2.24	38.26	2.8	1.69		
5	3.0		1.75	30.12	1.6		1.28	
Slope , mw = Correlation	0.0520 coefficient* =	0	.9987	Intercept, bw	-0.305	33		
			Set Point Ca	lculation				
From the Regres	teld Calibration Casion Equation, the et Point; $W = (m^2 + m^2)$	mw x Q			98/Ta)] ^{1/2}			
Remarks: Conducted by:	Wong Sh	ing Kwai	Signature:	\lambda	<u></u>	Date:	14-Feb-24	
Checked by:	Henry	Leung	Signature:	\-lem	y Xon	Date:	14-Feb-24	

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/024 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-Jan-24 Next Due Date: 4-Mar-24 Operator: SK Date: Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956 **Ambient Condition** 290 Temperature, Ta (K) Pressure, Pa (mmHg) 765.7 **Orifice Transfer Standard Information** 0.05928 Intercept, bc 3864 Slope, mc -0.03491 Serial No. $mc \times Ostd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 16-Jan-23 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ 16-Jan-24 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 13.6 3.75 63.89 9.9 3.20 11.3 7.9 2 3.42 58.29 2.86 53.21 3.12 6.2 2.53 4 5.6 2.41 41.21 3.0 1.76 3.5 2.0 1.44 5 1.90 32.70 By Linear Regression of Y on X Slope , mw = 0.0580 Intercept, bw : -0.5302 Correlation coefficient* = 0.9963 *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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.72 Remarks: Conducted by: Wong Shing Kwai Checked by: Henry Leung

Digital Dust Indicator



30-Jan-24

Date of Calibration

Certificate of Calibration

Description:

Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calib	oration Record 30-Mar-	24			
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 Sensitivity Adjustment	652				
Tisch Calibratio	n Orifice No.: 3864	After Sensitivity Adjustment	652				
	Ca	libration of 1 hr TSP					
Calibration	Laser Dust Monitor		HVS				
Point Mass Concentration (μg/m3)		m3) Ma	Mass concentration (μg/m ³)				
	X-axis		Y-axis				
1	75.0		137.0				
2	67.0		124.0				
3	55.0		102.0				
Average	65.7		121.0				
Slope , mw = Correlation co	1.7566 pefficient* = 0.9995	Intercept, bw =	5.6513				
		t Correlation Factor					
	centration by High Volume Sampler ((μg/m³)	121.0				
	centration by Dust Meter (μg/m ³)		65.7				
Measureing time			60.0				
Set Correlation I SCF = [K=Hig	Factor , SCF h Volume Sampler / Dust Meter, (μ	g/m3)] 1.8	<u> </u>				
The Dust Monitor Factor (CF) between	I in according to the instruction manual or was compared with a calibrated Higween the Dust Monitor and High Volupers are weighted by HOKLAS laborated	gh Volume Sampler and The resul me Sampler.	t was used to generate the Corr	relation			
Calibrated by	al Officer (Wong Shing Kwai)	_ Approved by Proje	: Ct Manager (Henry Leung)	7			

Digital Dust Indicator



30-Jan-24

Date of Calibration

Certificate of Calibration

Description:

-							
Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calib	ration Record	30-Mar-24			
Model No.:	LD-5R						
Serial No.:	8Y2373						
Equipment No.:	SA-01-05	Sensitivity 0.001 mg/m3	_				
High Volume Sa	ampler No.: A-01-03	Before Sensitivity Adjustment	657				
Tisch Calibration	n Orifice No.: 3864	After Sensitivity Adjustment	657				
	Ca	libration of 1 hr TSP					
Calibration	Laser Dust Monitor	r	HVS				
Point Mass Concentration (µg/m3)		/m3) Ma	Mass concentration (μg/m ³)				
	X-axis		Y-axis				
1	75.0		137.0				
2	65.0		118.0				
3	55.0		100.0				
Average	65.0		118.3				
Slope , mw = Correlation co							
D 1 1 C		t Correlation Factor	110.2				
	centration by High Volume Sampler	(μg/m²)	118.3				
Measureing time	centration by Dust Meter (μg/m³)		65.0				
Set Correlation I			00.0				
	h Volume Sampler / Dust Meter, (μ	g/m3)] 1.8					
The Dust Monitor Factor (CF) betw	I in according to the instruction manusor was compared with a calibrated Higween the Dust Monitor and High Volucers are weighted by HOKLAS laborated	gh Volume Sampler and The result me Sampler.	was used to gener	ate the Correlation			
Calibrated by:	al Officer (Wong Shing Kwai)	Approved by: Proje	ct Manager (Henry	Leung)			

Digital Dust Indicator



Date of Calibration 30-Jan-24

Certificate of Calibration

Description:

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibra	tion Record	30-Mar-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 Sensit	ivity Adjustment	645		
Tisch Calibratio	n Orifice No.:	3864	After Sensitiv	ity Adjustment	645		
		Ca	libration of 1 h	nr TSP			
Calibration		Laser Dust Monitor	r		HVS		
Point	N	fass Concentration (μg/	/m3)	Mass concentration (μg/m ³)			
		X-axis			Y-axis		
2	76.0 66.0				140.0 121.0		
3		55.0			101.0		
Average	65.7			120.7			
Slope , mw = Correlation co	1.85 pefficient* =	0.9999		cept, bw = -	-1.2432		
		Se	et Correlation I	actor			
Particaulate Con	centration by l	High Volume Sampler	$(\mu g/m^3)$	120.7			
	•	Dust Meter (μg/m ³)			65.7		
Measureing time					60.0		
Set Correlation I							
SCF = [K=Hig		npler / Dust Meter, (μ	g/m3)]	1.8			
	h Volume San	npler / Dust Meter, (μ to the instruction manu		1.8			
In-house method The Dust Monito Factor (CF) betw	h Volume San I in according to the comparison was comparison the Dust I		al: gh Volume Sam ıme Sampler.	pler and The result v	vas used to gener	rate the Correlation	
In-house method The Dust Monito Factor (CF) betv Those filter pap	I in according to was compariveen the Dust I pers are weigh	to the instruction manued with a calibrated High	al: gh Volume Sam ıme Sampler.	pler and The result v Litimed) Approved by:	vas used to gener	y Xvorj	



Certificate of Calibration

Description:	Digital Dust Indicator		Date of Calibration	30-Jan-24
Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibration Record	30-Mar-24
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	
	Cal	ibration of 1 h	r TSP	
Calibration	Laser Dust Monitor		HVS	
Point	Mass Concentration (μg/m3) X-axis		Mass concentration (Y-axis	μg/m ³)
1	73.0		140.0	
2	63.0		122.0	
3	53.0		101.0	
Average	63.0		121.0	
Slope, mw =	1.9500	Interv	cept, bw = -1.8500	,
Correlation co	oefficient* = 0.9990			
Correlation co		t Correlation F	actor	
		_	actor 121.0	
Particaulate Con Particaulate Con	Set centration by High Volume Sampler (μg/m³)	_	121.0 63.0	
Particaulate Con Particaulate Con Measureing time	Set centration by High Volume Sampler (μg/m³) centration by Dust Meter (μg/m³)	_	121.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I	Set centration by High Volume Sampler (μg/m³) centration by Dust Meter (μg/m³) centration by Dust	μg/m³)	63.0 60.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I	Set centration by High Volume Sampler (μg/m³) centration by Dust Meter (μg/m³)	μg/m³)	121.0 63.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High	Set centration by High Volume Sampler (μg/m³) centration by Dust Meter (μg/m³) centration by Dust	μg/m³) g/m3)]	63.0 60.0	
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=Higl In-house method The Dust Monito	Set centration by High Volume Sampler (centration by Dust Meter (μg/m³) c, (min) Factor , SCF h Volume Sampler / Dust Meter, (μg l in according to the instruction manual or was compared with a calibrated Hig	μg/m³) g/m3)] l: th Volume Sam	121.0 63.0 60.0	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High In-house method The Dust Monito Factor (CF) bety	Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) s, (min) Factor , SCF h Volume Sampler / Dust Meter, (μg l in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volume	μg/m³) g/m3)] l: th Volume Samme Sampler.	121.0 63.0 60.0 1.9	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High In-house method The Dust Monito Factor (CF) bety	Set centration by High Volume Sampler (centration by Dust Meter (μg/m³) c, (min) Factor , SCF h Volume Sampler / Dust Meter, (μg l in according to the instruction manual or was compared with a calibrated Hig	μg/m³) g/m3)] l: th Volume Samme Sampler.	121.0 63.0 60.0 1.9	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High In-house method The Dust Monito Factor (CF) bety	Set centration by High Volume Sampler (μcentration by Dust Meter (μg/m³) s, (min) Factor , SCF h Volume Sampler / Dust Meter, (μg l in according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volume	μg/m³) g/m3)] l: th Volume Samme Sampler.	121.0 63.0 60.0 1.9	erate the Correlation
Particaulate Con Particaulate Con Measureing time Set Correlation I SCF = [K=High In-house method The Dust Monito Factor (CF) bety	Set centration by High Volume Sampler (grentration by Dust Meter (μg/m³) s, (min) Factor, SCF h Volume Sampler / Dust Meter, (μg lin according to the instruction manual or was compared with a calibrated High veen the Dust Monitor and High Volumers are weighted by HOKLAS laboration.	μg/m³) g/m3)] l: th Volume Samme Sampler.	121.0 63.0 60.0 1.9	erate the Correlation

Digital Dust Indicator



Date of Calibration 30-Jan-24

Certificate of Calibration

Description:

Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ration Record	30-Mar-24	
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 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 Monitor				HVS			
Point	Point Mass Concentration (µg/m3)		/m3)	Mas	ss concentration ($\mu g/m^3$)	
_		X-axis			Y-axis		
1	75.0 65.0				141.0		
3	65.0 54.0				121.0 100.0		
Average	64.7				120.7		
By Linear Regression of Y on X Slope , mw = 1.9517							
		Se	et Correlation F	actor			
	•	High Volume Sampler	2	actor	120.7		
Particaulate Con	centration by I		2	actor	64.7		
Particaulate Con Measureing time	centration by I	High Volume Sampler	2	actor			
Particaulate Con Measureing time Set Correlation I	centration by I	High Volume Sampler	(μg/m ³)	actor	64.7		
Particaulate Con Measureing time Set Correlation F SCF = [K=High	centration by I , (min) Factor , SCF h Volume San	High Volume Sampler Dust Meter (μg/m ³)	(μg/m³) 1g/m3)]		64.7		
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by I (min) Factor , SCF Nolume San in according to the compare ween the Dust I	High Volume Sampler Dust Meter (μg/m³) npler / Dust Meter, (μ	ug/m³) ug/m3)] ual: gh Volume Samplume Sampler.	1.9 bler and The result	64.7	rate the Correlation	
Particaulate Con Measureing time Set Correlation F SCF = [K=High In-house method The Dust Monito Factor (CF) betw	centration by I c, (min) Factor , SCF h Volume San in according to or was compare ween the Dust I bers are weigh	High Volume Sampler Dust Meter (µg/m³) npler / Dust Meter, (µ to the instruction manued with a calibrated Hi Monitor and High Volume	ug/m³) ug/m3)] ual: gh Volume Samplume Sampler.	1.9 bler and The result Litimed) Approved by:	64.7	y Xvoy	

Digital Dust Indicator



Date of Calibration 30-Jan-24

Certificate of Calibration

Description:

Manufacturer:	Sibata Scientific Technology LTD.	_	Validity of Calibr	ration Record	30-Mar-24		
Model No.:	LD-5R						
Serial No.:	972781						
Equipment No.:	SA-01-10	Sensitivity	0.001 mg/m3	_			
High Volume Sa	mpler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment	734 CPM			
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment	734 CPM			
	Cal	libration of 1 h	r TSP				
Calibration	Laser Dust Monitor			HVS			
Point Mass Concentration (µg/m3 X-axis		m3)	Mass concentration (μg/m ³) Y-axis				
1	82.0		134.0				
2	72.0		116.0				
3	62.0		100.0				
Average	72.0			116.7			
Slope , mw = Correlation co			eept, bw =	-5.7333	<u>'</u>		
		t Correlation F	actor				
	centration by High Volume Sampler (μg/m³)	116.7				
Measureing time	centration by Dust Meter (µg/m³)		72.0				
Set Correlation F				60.0			
	n Volume Sampler / Dust Meter, (με	g/m3)]	1.6				
The Dust Monitor Factor (CF) betw	in according to the instruction manual or was compared with a calibrated Hig yeen the Dust Monitor and High Volumers are weighted by HOKLAS labor	gh Volume Samp me Sampler.		was used to gene	rate the Correlation		
Calibrated by:	al Officer (Wong Shing Kwai)	_	Approved by: Projec	len et Manager (Henr	y (X>) y Leung)		



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294
Pa: 755.4

°K

Operator: Jim Tisch

Calibration Model #: TE-5025A

Calibrator S/N: 3864

mm Hg

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4380	3.3	2.00
2	3	4	1	1.0270	6.4	4.00
3	5	6	1	0.9180	8.0	5.00
4	7	8	1	0.8750	8.9	5.50
5	9	10	1	0.7230	12.9	8.00

		Data Tabula	tion		
Vstd	Qstd	$\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$		Qa	√∆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	7 ~ 1	r=	0.99998

	Calculation	15	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd= Vstd/ΔTime Qa= Va/ΔTime			
For subsequent flow rate calculations:			
Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$ Qa= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Ta}{Pa}\right)}\right)$			$1/m\left(\left(\sqrt{\Delta H(Ta/Pa)}\right)-b\right)$

	Standard Conditions
Tstd:	298.15 °K
Pstd:	760 mm Hg
	Key
ΔH: calibrato	r manometer reading (in H2O)
ΔP: rootsmet	er manometer reading (mm Hg)
Ta: actual ab:	solute temperature (°K)
Pa: actual ba	rometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

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

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

www.tisch-env.com

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



Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House

Manufacturer: <u>Davis Instruments</u>

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

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

Equipment No.: SA-03-04

Date of Calibration <u>18-Aug-2023</u>

Next Due Date <u>18-Feb-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	1.5	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

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

Equipment No.: <u>SA-03-04</u>

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	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

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00370 Issue Date : 02 May 2023

Application No. : HP00242

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.: : SN-01-01

Manufacturer: : SVANTEK

Other information : | Model No. | SVAN 979

Serial No. 27189
Microphone No. 25202

Date Received : 02 May 2023

Test Period : 02 May 2023 to 02 May 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



Report No. : 00370 Issue Date : 02 May 2023

Application No. : HP00242

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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00430 Issue Date : 08 Sep 2023

Application No. : HP00304

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

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

Date Received : 06 Sep 2023

Test Period : 07 Sep 2023 to 07 Sep 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. : HP00304

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	114.2	+ 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. : 00361 | Issue Date : 30 Mar 2023

Application No. : HP00236

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 : N

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

Date Received : 27 Mar 2023

Test Period : 28 Mar 2023 to 28 Mar 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



Report No. : 00361 Issue Date : 30 Mar 2023

Application No. : HP00236

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	114.3	+ 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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NT, Hong Kong

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



Report No. : 00364 | Issue Date : 03 Apr 2023

Application No. : HP00240

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 : 03 Apr 2023

Test Period : 03 Apr 2023 to 03 Apr 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

:



Report No. : 00364 | Issue Date : 03 Apr 2023

Application No. : HP00240

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	114.2	+ 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.

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00393 | Issue Date : 02 Aug 2023

Application No. : HP00275

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-13-01

Manufacturer: : SOUNDTEK

Other information : Model No. ST-120

Serial No. 181001608

Date Received : 28 Jul 2023

Test Period : 31 Jul 2023 to 31 Jul 2023

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. : 00393 | Issue Date : 02 Aug 2023

Application No. : HP00275

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	94.1	+ 0.1	± 0.3
114.0	114.2	+ 0.2	± 0.5

Note

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

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NT, Hong Kong

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



Report No. : 00396 Issue Date : 02 Aug 2023

Application No. : HP00278

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-13-02

Manufacturer: : SOUNDTEK

Other information : | Model No. | ST-120

Serial No. 181001636

Date Received : 01 Aug 2023

Test Period : 01 Aug 2023 to 01 Aug 2023

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

Lee Wai Kit Laboratory Manager

Page 1 of 2

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00396 | Issue Date : 02 Aug 2023

Application No. : HP00278

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	94.1	+ 0.1	± 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

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



Report No. : 00389 | Issue Date : 20 Jul 2023

Application No. : HP00262

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 : 18 Jul 2023

Test Period : 19 Jul 2023 to 19 Jul 2023

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. : 00389 Issue Date : 20 Jul 2023

Application No. : HP00262

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	94.2	+ 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.