

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



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024

Rootsmeter S/N: 438320

Ta: 294

°K

Operator: Jim Tisch

Pa: 755.4

mm Hg

Calibration Model #: TE-5025A

Calibrator S/N: 3864

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

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

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

	Standard Conditions					
Tstd:	298.15 °K					
Pstd:	760 mm Hg					
	Key					
ΔH: calibrator 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

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

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High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0047

Project No.	AM1 - Tin Hau	Temple					
Date:	14-Apr-24		Next Due Date:	Jext Due Date: 14-Jun-24		Operator: SK	SK
Equipment No.:	A-0	1-05	Model No.:	GS	S2310	Serial No.	10599
			Ambient C	ondition			
Temperatur	re. Ta (K)	300.7	Pressure, Pa			759.1	
	, ()		1	(8)	ı	,,,,,	
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	ation Date:	15-Jan-24			$c = [\Delta H \times (Pa/760]]$		
Next Calibra	ation Date:	14-Jan-25		$\mathbf{Qstd} = \{ [\Delta \mathbf{H} \ \mathbf{x}] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / mc	:
	l		Calibration of 7	TSP Sampler	T		
Calibration	+ T (10")	Oı	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		3.60	61.10	8.9	2	.97
2	10.4		3.21	54.53	6.6	2	.56
3	7.5		2.72	46.43	4.6	2	.13
4	5.3		2.29	39.17	3.0	1	.72
5	3.0		1.72	29.68	1.8	1	.33
By Linear Regr Slope , mw =	ression of Y on X	K	,	Intercent hw -	-0.266	. (0	
	coefficient* =	_	.9973	mtercept, bw	-0.200		
	Coefficient < 0.99			•			
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration C	Curve, take Ostd					
	sion Equation, th						
	•			(D. (E.(1)) (A)	20/m \1/2		
		mw x ($\mathbf{Qstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) x (29	98/Ta)]""		
Therefore, Se	et Point; W = (m	uw x Qstd + bw)	² x (760 / Pa) x (7	Γa / 298) =	3.95		
Remarks:							
					1		
Conducted by:	Wong Sh	ning Kwai	Signature:		<u> </u>	Date:	14-Apr-24
Checked by:	Henry	Leung	Signature:	\-lem	y Xvy	Date:	14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0047

Project No.	AM2 - Sai Tso	Wan Recreation	Ground				
Date:	14-Apr-24		Next Due Date: 14-Ju		Jun-24	Operator:	SK
Equipment No.:	A-0	01-08	Model No.:	G:	GS2310		1287
			Ambient C	ondition			
Temperatur	re, Ta (K)	300.7	Pressure, Pa			759.1	
~			ifice Transfer Star			_	0.07010
Serial		3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	The state of the s	15-Jan-24			$c = [\Delta H \times (Pa/760)]$ $(Pa/760) \times (298/7)$		
Next Calibra	ation Date:	14-Jan-25		$QSIU = \{[\Delta \Pi X]\}$	(Fa/700) X (290/	1a)j -bc}/II	ic
		•	Calibration of 7	TSP Sampler			
C 12 - 2		Or	fice			HVS	
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7	60) x (298/Ta)] ^{1/2} /-axis
1	13.2		3.61	61.33	8.7		2.93
2	10.2		3.18	54.01	6.4		2.52
3	7.5		2.72	46.43	4.5		2.11
4	5.2		2.27	38.80	2.9		1.69
5	3.0		1.72	29.68	1.5		1.22
Slope , mw = Correlation	0.0542 coefficient* =		. 9999	Intercept, bw	-0.399	22	
*If Correlation C	Coefficient < 0.9	90, check and rec	alibrate.				
			Set Point Ca	alculation			
From the TSP Fi	eld Calibration (Curve, take Qstd	= 43 CFM				
From the Regress	sion Equation, tl	ne "Y" value acco	ording to				
		mw v C	$\mathbf{pstd} + \mathbf{bw} = [\Delta \mathbf{W} \ \mathbf{x}]$	(Pa/760) v /20	08/Ta)1 ^{1/2}		
		mw x Ç	_ζ οια ⊤ υw – [Δ W X	(1 a/ / UU) X (2)	vo: 1 a) j		
Therefore, Se	et Point; W = (n	nw x Qstd + bw)	² x (760 / Pa) x (7	$\Gamma a / 298) =$	3.76		
Remarks:							
				h	ما		
Conducted by:	Wong Sl	ning Kwai	Signature:		<u> </u>	Date:	14-Apr-24
				\ 0	^/		
Checked by:	Henry	Leung	Signature:	- tem	y Way	Date:	14-Apr-24

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0047

Project No.	AM3 - Yau Lai	Estate, Bik Lai I	House				
Date:	14-Apr-24		Next Due Date: 14-Jun-24		Jun-24	Operator:	SK
Equipment No.:	A-0	1-03			S2310		10379
			•				
			Ambient C	ondition			
Temperatu	re, Ta (K)	300.7	Pressure, Pa	(mmHg)		759.1	
a			ifice Transfer Star				0.05010
Serial		3864	Slope, mc	0.05976	Intercept		-0.05018
Last Calibra	i	15-Jan-24			$c = [\Delta H \times (Pa/760)]$ $(Pa/760) \times (298/760)$		
Next Calibra	ation Date:	14-Jan-25		<u> </u>	(Fa/700) X (290/	1a)j -bc}/1	iic .
		•	Calibration of T	TSP Sampler			
Calibratian		Or	fice			HVS	
Calibration Point	ΔH (orifice), in. of water		50) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of water	[ΔW x (Pa/7	760) x (298/Ta)] ^{1/2} Y-axis
1	12.9		3.57	60.64	8.3		2.87
2	10.6		3.24	55.04	6.4		2.52
3	7.8		2.78	47.34	4.6		2.13
4	5.0		2.22	38.07	3.0		1.72
5	3.0		1.72	29.68	1.7		1.30
Slope , mw = Correlation		0	.9987	Intercept, bw	-0.182	29	
			Set Point Ca	alculation			
From the Regres	eld Calibration C sion Equation, th et Point; $W = (m)$	mw x Q			98/Ta)] ^{1/2}		
Remarks: Conducted by:	Wong Sh	ing Kwai	Signature:	\\	X -	Date:	14-Apr-24
Checked by:	Henry	Leung	Signature:	- lem	y day	Date:	14-Apr-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/025

Project No.	CKL 2 - Flat 103	3 Cha Kwo Ling	Village				
Date:	4-Ma	ar-24	Next Due Date:	4-N	Лау-24	Operator:	SK
Equipment No.:	A-0	1-55	Model No.:	TE	E 5170	Serial No.	1956
			Ambient C	ondition			
Temperature, Ta (K) 292.7 Pressure, Pa (mmHg) 759.3							
•	, , ,		,				
		Or	ifice Transfer Star	ndard Informa	ation		
Serial	No.	3864	Slope, mc	0.05976	Intercept	t, bc	-0.05018
Last Calibra	ntion Date:	15-Jan-24	r	nc x Qstd + bo	$c = [\Delta H \times (Pa/760)]$) x (298/Ta)] ¹	/2
Next Calibra	ation Date:	14-Jan-25	•	$Qstd = \{ [\Delta H \ x] \}$	(Pa/760) x (298/7	Γa)] ^{1/2} -bc} / m	nc
			Calibration of T	ΓSP Sampler			
Calibration		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} Y -axis
1	13.7		3.73	63.31	9.8		3.16
2	11.4		3.41	57.82	7.8	2.82	
3	9.5		3.11	52.86	6.1		2.49
4	5.7		2.41	41.13	3.1		1.78
5	3.6		1.91	32.86	2.0		1.43
By Linear Regression Slope, mw = Correlation Correlation C	0.0577 coefficient* =	0	.9975 calibrate.	Intercept, bw	-0.530	<u>5</u>	
Enom the TCD Ei	ald Calibration C	Samue Anles Ootel	Set Point Ca	uculation			
From the TSP Fig		_					
From the Regress	sion Equation, th	e i value acco	naing to				
		mw x Q	$\mathbf{Qstd} + \mathbf{bw} = [\mathbf{\Delta W} \ \mathbf{x}]$	(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) =	3.75		
Remarks:							
Conducted by:	Wong Sh	ing Kwai	Signature:	X	<u>y</u> .	Date:	4-Mar-24
Checked by:	Henry	Leung	Signature:	\-lem	g dog	Date:	4-Mar-24

High-Volume TSP Sampler

5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/026 Project No. CKL 2 - Flat 103 Cha Kwo Ling Village 4-May-24 Next Due Date: 4-Jul-24 Operator: SK Date: Model No.: TE 5170 Serial No. 1956 Equipment No.: A-01-55 **Ambient Condition** Temperature, Ta (K) 297 Pressure, Pa (mmHg) 757 **Orifice Transfer Standard Information** 0.05976 Intercept, bc -0.05018 3864 Slope, mc Serial No. mc x Qstd + bc = $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ Last Calibration Date: 15-Jan-24 Qstd = $\{ [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} -bc \} / mc$ Next Calibration Date: 14-Jan-25 **Calibration of TSP Sampler** Orfice HVS Calibration $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ 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 13.8 3.71 62.98 9.7 3.11 1 2.77 11.5 3.39 57.57 7.7 52.67 9.6 3.10 6.0 2.45 4 5.8 2.41 41.13 3.0 1.73 2.0 5 3.7 1.92 33.02 1.41 By Linear Regression of Y on X Slope , mw = 0.0578 Intercept, bw : -0.5654 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; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.70 Remarks: Signature: Date: 4-May-24

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



Certificate of Calibration

Description:	Laser Dust Mor	nitor		Date of	f Calibration	30-Mar-24
Manufacturer:	Sibata Scientific Technology LTD.			Validity of Calibra	30-May-24	
Model No.:	LD-3B			·		•
Serial No.:	2Y6194					
Equipment No.:			Sensitivity	0.001 mg/m3		
High Volume Sa		A-01-03	-	sitivity Adjustment	578	
Tisch Calibration	-	3864		tivity Adjustment	578	
	-					
		I D M.	Calibration of 1 hr	TSP	TIXIC	
Calibration		Laser Dust Mor	itor / Minute	Maga	HVS concentration (µ	19/m ³)
Point	Total Count		-axis	Mass	Y-axis	tg/III)
1	4000		75.0		142.0	
2	3600		65.0		124.0	
3	3000		55.0		103.0	
Aver	age	ı	65.0		123.0	
By Linear Regression of Y on X Slope , mw = 1.9500 Intercept, bw = -3.7500 Correlation coefficient* = 0.9990						
Set Correlation F	Factor , SCF	oler / Dust Meter, (1.9		
The Dust Monito (CF) between the	or was compared e Dust Monitor a	and High Volume Sa	igh Volume Sampler a		,	
Calibrated by: Technic	cal Officer (Wor	ng Shing Kwai)			Project Manager	1 1



Certificate of Calibration

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

Description:	Laser Dust Mo	nitor		Date of Calibration 31-May-24					
Manufacturer:	Sibata Scientif	ic Technology LTD.		Validity of Calibra	tion Record	31-Jul-24			
Model No.:	LD-3B								
Serial No.:	2Y6194	_							
Equipment No.:	SA-01-02		Sensitivity	0.001 mg/m3					
High Volume Sa	mpler No.:	A-01-03	Before Sensi	tivity Adjustment	578				
Tisch Calibration	n Orifice No.:	3864	After Sensiti	vity Adjustment	578				
		Calib	ration of 1 hr T	SD SD					
		Laser Dust Monitor	lation of 1 m 1	51	HVS				
Calibration Point	Total Count	Count / Minu	te	Mass	concentration (µ	$\frac{1}{\text{ug/m}^3}$			
Total Cou		X-axis		Y-axis					
1	4000	76.0			143.0				
2	3600	66.0			122.0				
3	3000	55.0			102.0				
Aver	rage	65.7			122.3				
Slope, mw =	Slope , mw = 1.9502 Intercept, bw = -5.7266 Correlation coefficient* = 0.9991								
Set Correlation I SCF = [K=Hig		pler / Dust Meter, (μ g/m3))]	1.9					
The Dust Monito (CF) between the	or was compared e Dust Monitor	o the instruction manual: d with a calibrated High Volume High Volume Sampler. ed by HOKLAS laboratory			d to generate the	Correlation Factor			
Calibrated by:	cal Officer (Wor	ng Shing Kwai)		Approved by:	Project Manager	(Henry Leung)			



Certificate of Calibration

Description:	Digital Dust Indicator			Date of Calibration 30-Mar-24			
Manufacturer:	Sibata Scienti	fic Technology LTD.	_	Validity of Calibration Record		30-May-24	
Model No.:	LD-5R						
Serial No.:	8Y2374						
Equipment No.:	SA-01-04		Sensitivity	0.001 mg/m3			
High Volume Sa	mpler No.:	A-01-03	Before Sensiti	vity Adjustment	652		
Tisch Calibration	n Orifice No.:	3864	After Sensitiv	ity Adjustment	652		
	,	Ca	libration of 1 h	r TSP			
Calibration		Laser Dust Monitor			HVS		
Point	М	ass Concentration (µg/: X-axis	m3)	Mass concentration (μg/m³) Y-axis			
1		76.0			138.0		
2		66.0			122.0		
3		56.0			101.0		
Average 66.0				120.3			
Slope , mw = Correlation co	1.850 pefficient* =	0.9970		cept, bw =	-1.7667		
			t Correlation I	Tactor			
	· ·	ligh Volume Sampler ($(\mu g/m^3)$		120.3		
	•	Oust Meter (μg/m ³)		66.0			
Measureing time					60.0		
Set Correlation I SCF = [K=Higl		pler / Dust Meter, (μ	g/m3)]	1.8			
The Dust Monitor Factor (CF) betw	or was compare veen the Dust N	o the instruction manual of with a calibrated Hig Monitor and High Voluted by HOKLAS laborated	gh Volume Sam me Sampler.	_	was used to gener	ate the Correlation	
Calibrated by:		ng Shing Kwai)	_	Approved by: Projec	Lengt Manager (Henry	Leung)	

Digital Dust Indicator



31-May-24

Date of Calibration

Certificate of Calibration

Description:

-						
Manufacturer:	Sibata Scient	ific Technology LTD.	_	Validity of Calibr	ration Record	31-Jul-24
Model No.:	LD-5R					
Serial No.:	8Y2374					
Equipment No.:	SA-01-04		Sensitivity	0.001 mg/m3	·	
High Volume Sa	impler No.:	A-01-03	Before Sensitiv	rity Adjustment	652	
Tisch Calibratio	n Orifice No.:	3864	After Sensitivit	y Adjustment	652	
		Ca	libration of 1 hi	TSP		
Calibration		Laser Dust Monitor	·	HVS		
Point	N.	lass Concentration (µg/	(m3)	Mass concentration (μg/m ³)		
		X-axis		Y-axis		
1	77.0				137.0	
2	67.0				120.0	
3	57.0			101.0		
Average		67.0			119.3	
Slope , mw = Correlation co	1.80 pefficient* =	0.9995		ept, bw =	-1,2667	
		Se	t Correlation Fa	actor		
Particaulate Con	centration by l	High Volume Sampler ($(\mu g/m^3)$		119.3	
Particaulate Con	centration by I	Dust Meter (μg/m ³)			67.0	
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		
The Dust Monitor Factor (CF) betw	or was compare veen the Dust I	to the instruction manual ed with a calibrated Hiş Monitor and High Volunted by HOKLAS laborated	gh Volume Samp me Sampler.		was used to gener	rate the Correlation
Calibrated by: Technic		ong Shing Kwai)	_	Approved by:	t Manager (Henry	Leung)

Digital Dust Indicator



Date of Calibration 30-Mar-24

Certificate of Calibration

Description:

Manufacturer:	Sibata Scientific Technology LTD.	Validity of Calibration Record30-May-24			30-May-24
Model No.:	LD-5R				
Serial No.:	8Y2373				
Equipment No.:	SA-01-05	Sensitivity	0.001 mg/m3		
High Volume Sa	ampler No.: <u>A-01-03</u>	Before Sensiti	vity Adjustment _	657	
Tisch Calibration	n Orifice No.: 3864	After Sensitivi	ty Adjustment	657	
	Ca	alibration of 1 h	r TSP		
Calibration	Laser Dust Monito	r		HVS	
Point	Mass Concentration (μg. X-axis	/m3)	Mass	concentration (μ Y-axis	ıg/m³)
1	74.0		136.0		
2	64.0		116.0		
3	54.0			100.0	
Average	64.0			117.3	
Correlation co		et Correlation F	actor		
Particaulate Con	centration by High Volume Sampler			117.3	
	icentration by Dust Meter (µg/m³)	(18)		64.0	
Measureing time				60.0	
Set Correlation I	Factor, SCF				
SCF = [K=Hig	h Volume Sampler / Dust Meter, (μ	ıg/m3)]	1.8		
The Dust Monitor Factor (CF) betw	I in according to the instruction manuor was compared with a calibrated Hiween the Dust Monitor and High Volucers are weighted by HOKLAS laborated	gh Volume Samp ime Sampler.		as used to gener	ate the Correlation
Calibrated by:	al Officer (Wong Shing Kwai)	_	Approved by: _ Project	Manager (Henry	Leung)



Certificate of Calibration

Description:	Digital Dust I	ndicator		Date of Calibration 31-May-24		
Manufacturer:	Sibata Scienti	fic Technology LTD.	<u> </u>	Validity of Calibra	ation Record	31-Jul-24
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	orifice No.:	3864	After Sensitiv	ty Adjustment	657	
		Ca	libration of 1 h	r TSP		
Calibration		Laser Dust Monitor			HVS	
Point	М	ass Concentration (μg/ X-axis	m3)	Mass concentration (μg/m³) Y-axis		
1		76.0			135.0	
2	66.0				115.0	
3	55.0			100.0		
Average	65.7				116.7	
Slope , mw = Correlation co	1.662 pefficient* =	0.9940			7.5529	
- · · · ·			t Correlation F	actor		
		High Volume Sampler (μg/m³)		116.7	
Measureing time		Dust Meter (μg/m ³)			65.7	
Set Correlation F					00.0	
		npler / Dust Meter, (μ	g/m3)]	1.8		
The Dust Monitor Factor (CF) betw	or was compare veen the Dust N	o the instruction manual of with a calibrated High Monitor and High Voluted by HOKLAS laborated	gh Volume Sam me Sampler.		was used to gener	ate the Correlation
Calibrated by:		ng Shing Kwai)	_	Approved by: _ Project	Manager (Henry	

Digital Dust Indicator



30-Mar-24

Date of Calibration

Certificate of Calibration

Description:

-						
Manufacturer: Sibata Scientific Technology LTD.			Validity of Calibration Record 30-May-24			
Model No.:	LD-5R					
Serial No.:	972777					
Equipment No.:	SA-01-06		Sensitivity _	0.001 mg/m3		
High Volume Sa	mpler No.: A-0	01-03	Before Sensitiv	ity Adjustment	645	
Tisch Calibration	n Orifice No.: 3	864	After Sensitivity	y Adjustment	645	
		Ca	libration of 1 hr	TSP		
Calibration	La	ser Dust Monito	r		HVS	
Point	Mass (Concentration (µg/	/m3)	Mas	s concentration ($\mu g/m^3$)
		X-axis			Y-axis	
1	75.0				141.0	
2	65.0				120.0	
	3 55.0			101.0		
Average 65.0					120.7	
Slope , mw = Correlation co	2.0000 pefficient* =	0.9996		ept, bw =	-9.3333	<u>; </u>
		Se	et Correlation Fa	ctor		
Particaulate Con	centration by High	Volume Sampler	$(\mu g/m^3)$		120.7	
Particaulate Con	centration by Dust	Meter ($\mu g/m^3$)			65.0	
Measureing time	e, (min)				60.0	
Set Correlation I	Factor, SCF					
SCF = [K=Hig	h Volume Sampler	/ Dust Meter, (µ	g/m3)]	1.9		
In-house method	in according to the	instruction manu	al:			
The Dust Monito	or was compared wi	th a calibrated Hi	gh Volume Sampl	ler and The result	was used to gene	rate the Correlation
	veen the Dust Moni	•	•			
Those filter pap	ers are weighted b	by HOKLAS labo	oratory (HPCT I	Litimed)		
Calibrated by:	m	<u></u>	_	Approved by:	-lem	y Xon
Technic	al Officer (Wong Sl	ning Kwai)		Projec	t Manager (Henr	Leung)

Digital Dust Indicator



31-May-24

Date of Calibration

Certificate of Calibration

Description:

•						·
Manufacturer:	Manufacturer: Sibata Scientific Technology LTD.			Validity of Calibration Record 31-Jul-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 Sensitiv	rity Adjustment	645	
Tisch Calibration	n Orifice No.:	3864	After Sensitivit	y Adjustment	645	
		Ca	libration of 1 hr	TSP		
Calibration		Laser Dust Monitor	•	HVS		
Point	M	lass Concentration (µg/	m3)	Mas	s concentration (µ	ug/m ³)
		X-axis		Y-axis		
1	77.0				138.0	
2	67.0				119.0	
3	58.0			100.0		
Average		67.3			119.0	
Slope , mw = Correlation co		0.9995		ept, bw =	-15.5424	<u> </u>
		Se	t Correlation Fa	ector		
Particaulate Con	centration by I	High Volume Sampler ($(\mu g/m^3)$	119.0		
Particaulate Con	centration by I	Oust Meter (μg/m ³)			67.3	
Measureing time	, (min)				60.0	
Set Correlation F	Factor, SCF					
SCF = [K=Higl	h Volume San	npler / Dust Meter, (μ	g/m3)]	1.8		
The Dust Monitor Factor (CF) betw	or was compare veen the Dust I	to the instruction manual of with a calibrated High Monitor and High Volunted by HOKLAS laborated	gh Volume Samp me Sampler.		was used to gener	rate the Correlation
Calibrated by:		ng Shing Kwai)	_	Approved by:	t Manager (Henry	Leung)

Digital Dust Indicator



30-Mar-24

Date of Calibration

Certificate of Calibration

Description:

-							
Manufacturer:	Manufacturer: Sibata Scientific Technology LTD.			Validity of Calibration Record 30-May-24			
Model No.:	LD-5R						
Serial No.:	972778						
Equipment No.:	SA-01-07		Sensitivity 0.001 mg/m3	_			
High Volume Sa	ampler No.:	A-01-03	Before Sensitivity Adjustment	735 CPM			
Tisch Calibratio	n Orifice No.:	3864	After Sensitivity Adjustment	735 CPM			
		Ca	libration of 1 hr TSP				
Calibration		Laser Dust Monitor	r	HVS			
Point	M	ass Concentration (µg/	/m3) Ma	ss concentration (ug/m ³)		
	ļ	X-axis		Y-axis			
1	ļ	72.0		141.0			
2		62.0		121.0			
3		52.0		100.0			
Average	rerage 62.0			120.7			
Slope , mw = Correlation co	2.050 pefficient* =	0.9999	Intercept, bw =	-6.4333			
		Se	et Correlation Factor				
Particaulate Con	centration by F	High Volume Sampler	$(\mu g/m^3)$	120.7			
Particaulate Con	centration by I	Oust Meter (μg/m ³)		62.0			
Measureing time	e, (min)			60.0			
Set Correlation 1	Factor, SCF						
SCF = [K=High Volume Sampler / Dust Meter, (µg/m3)] 1.9							
	h Volume Sam	npler / Dust Meter, (μ	g/m3)]1.9				
In-house method		npler / Dust Meter, (μ o the instruction manu					
	l in according to	o the instruction manu			rate the Correlation		
The Dust Monitor Factor (CF) betw	I in according to or was compare ween the Dust M	o the instruction manued with a calibrated High Monitor and High Volu	al: gh Volume Sampler and The resultine Sampler.		rate the Correlation		
The Dust Monitor Factor (CF) betw	I in according to or was compare ween the Dust M	o the instruction manued with a calibrated High Monitor and High Volu	al: gh Volume Sampler and The result		rate the Correlation		
The Dust Monitor Factor (CF) betw	I in according to or was compare ween the Dust M	o the instruction manued with a calibrated High Monitor and High Volu	al: gh Volume Sampler and The resultine Sampler.		rate the Correlation		
The Dust Monitor Factor (CF) between Those filter paper	I in according to or was compare ween the Dust Noers are weight	o the instruction manued with a calibrated High Monitor and High Volu	al: gh Volume Sampler and The resultine Sampler. pratory (HPCT Litimed)	was used to gener	rate the Correlation		
The Dust Monitor Factor (CF) between Those filter paper and Calibrated by:	I in according to or was compare ween the Dust Moers are weight	o the instruction manued with a calibrated High Monitor and High Volu	al: gh Volume Sampler and The resultance Sampler. pratory (HPCT Litimed) Approved by	was used to gener	y dag		

Digital Dust Indicator



Date of Calibration 31-May-24

Certificate of Calibration

Description:

Manufacturer: Sibata Scientific Technology LTD.			_	Validity of Calibration Record 31-Jul-24			
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 Sensiti	vity Adjustment	735 CPM		
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	735 CPM		
		Ca	libration of 1 h	r TSP			
Calibration		Laser Dust Monitor		HVS			
Point	M	Iass Concentration (μg/	m3)	Mas	ss concentration (µ	ig/m ³)	
1		X-axis		Y-axis			
2	75.0 65.0				140.0 121.0		
3	55.0				99.0		
Average	65.0				120.0		
Slope , mw = Correlation co	2.05 pefficient* =	0.9991		ept, bw =	-13.2500	<u> </u>	
		Se	t Correlation F	actor			
	-	High Volume Sampler ($(\mu g/m^3)$	120.0			
		Dust Meter (μg/m³)			65.0		
Measureing time					60.0		
Set Correlation I SCF = [K=Hig		npler / Dust Meter, (μ	g/m3)]	1.8			
In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler. Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)							
Calibrated by:	,	ong Shing Kwai)	_	Approved by:	Ct Manager (Henry	Leung)	

Digital Dust Indicator



30-Mar-24

Date of Calibration

Certificate of Calibration

Description:

-								
Manufacturer: Sibata Scientific Technology LTD.			Validity of Calibration Record 30-May-24					
Model No.:	LD-5R							
Serial No.:	972780							
Equipment No.:	SA-01-09		Sensitivity	0.001 mg/m3	_			
High Volume Sa	impler No.:	A-01-03	Before Sensitiv	vity Adjustment	739 CPM			
Tisch Calibration	n Orifice No.:	3864	After Sensitivi	ty Adjustment	739 CPM			
		Ca	libration of 1 h	r TSP				
Calibration		Laser Dust Monitor	•	HVS				
Point	N	lass Concentration (µg/	/m3)	Mas	ss concentration (ug/m^3)		
		X-axis		Y-axis				
1	74.0				142.0			
2	64.0				122.0			
3	54.0			100.0				
Average	verage 64.0				121.3			
- '	Slope , mw = 2.1000 Intercept, bw = -13.0667 Correlation coefficient* = 0.9996							
		Se	t Correlation F	actor				
Particaulate Con	centration by	High Volume Sampler ($(\mu g/m^3)$	121.3				
Particaulate Con	centration by	Dust Meter (μg/m ³)			64.0			
Measureing time	e, (min)				60.0			
Set Correlation I	Factor, SCF							
SCF = [K=Hig	h Volume San	npler / Dust Meter, (μ	g/m3)]	1.9				
In-house method	l in according	to the instruction manua	al:					
	-	red with a calibrated Hig		oler and The result	was used to gene	rate the Correlation		
		Monitor and High Volunted by HOKLAS labor	_	Litimed)				
Calibrated by:		ml.	_	Approved by:	\-lem	y Olan		
Technic	al Officer (Wo	ong Shing Kwai)		Projec	ct Manager (Henr	Leung)		

Digital Dust Indicator



Date of Calibration 31-May-24

Certificate of Calibration

Description:

Manufacturer: Sibata Scientific Technology LTD.			_	Validity of Calibration Record 31-Jul-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		
		Cal	libration of 1 h	r TSP			
Calibration		Laser Dust Monitor			HVS		
Point	Mass Concentration (μg/m3)			Mas	ss concentration (ug/m ³)	
	X-axis			Y-axis			
1					140.0		
3	63.0 53.0				120.0 101.0		
Average	63.0				120.3		
Slope , mw = Correlation co	1.95 pefficient* =	0.9999		cept, bw =	-2.5167	_	
Particaulate Con	centration by I	High Volume Sampler (t Correlation F	actor	120.3		
		Oust Meter (µg/m ³)	mg III)		63.0		
Measureing time		(10)		60.0			
Set Correlation I SCF = [K=High		npler / Dust Meter, (με	g/m3)]	1.9			
In-house method in according to the instruction manual: The Dust Monitor was compared with a calibrated High Volume Sampler and The result was used to generate the Correlation Factor (CF) between the Dust Monitor and High Volume Sampler. Those filter papers are weighted by HOKLAS laboratory (HPCT Litimed)							
Calibrated by:		ng Shing Kwai)	_	Approved by:	Lement Manager (Henr		



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.: C241168

證書編號

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

Date of Receipt / 收件日期: 21 February 2024

Description / 儀器名稱

Acoustical Calibrator

Manufacturer / 製造商

Brüel & Kjær

Model No. / 型號

4231

Serial No. / 編號

2326353

Supplied By / 委託者

Cinotech Consultants Limited

Room 1710, Technology Park, 18 On Lai Street,

Shatin, N.T. Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 温度 :

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

Relative Humidity / 相對濕度 :

 $(50 \pm 25)\%$

Line Voltage / 電壓

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

3 March 2024

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

The results do not exceed specified limits.

These limits refer to manufacturer's published tolerances as requested by the customer.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via:

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

Tested By 測試

H T Wong

Assistant Engineer

Certified By 核證

K/C Lee Engineer Date of Issue 簽發日期

Website/網址: www.suncreation.com

4 March 2024

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



輝創工程有限公司

Sun Creation Engineering Limited

Calibration & Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C241168

證書編號

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

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment:

Equipment ID

CL130 CL281

CL281 TST150A Description

Universal Counter

Multifunction Acoustic Calibrator

Measuring Amplifier

Certificate No.

C233799

CDK2302738 C221750

4. Test procedure: MA100N.

5. Results:

5.1 Sound Level Accuracy

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

5.2 Frequency Accuracy

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

Remark: The uncertainties are for a confidence probability of not less than 95 %.

Note:

Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 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

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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.

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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.

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NT, Hong Kong

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



Report No. : 00676 Issue Date : 03 May 2024

Application No. : HP00537

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 2024

Test Period : 02 May 2024 to 02 May 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. : HP00537

Certificate of Calibration

Measuring equipment

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

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	114.1	+ 0.1	± 1.5

Note

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

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NT, Hong Kong

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



Report No. : 00390 | Issue Date : 24 Jul 2023

Application No. : HP00263

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 : 18 Jul 2023

Test Period : 20 Jul 2023 to 20 Jul 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. : 00390 | Issue Date : 24 Jul 2023

Application No. : HP00263

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	114.1	+ 0.1	± 1.5

Note

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

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NT, Hong Kong

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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

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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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Application No. : HP00514

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-01

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00647 Issue Date : 11 Apr 2024

Application No. : HP00514

Certificate of Calibration

Measuring equipment

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

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.2	+ 0.2	± 1.5

Note

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

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

Application No. : HP00436

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-03

Manufacturer: : BSWA Technology

Other information : | N

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

Date Received : 05 Feb 2024

Test Period : 07 Feb 2024 to 07 Feb 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

Rm 1904, Technology Park 18 On Lai Street, Shatin

NT, Hong Kong

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



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

Application No. : HP00436

Certificate of Calibration

Measuring equipment

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

Test Result

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.0	± 0.0	± 1.5
114.0	113.9	- 0.1	± 1.5

Note

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

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

Application No. : HP00515

Certificate of Calibration

Applicant : Cinotech Consultants Limited

RM 1710, Technology Park,

18 On Lai Street,

Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-05

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 09 Apr 2024

Test Period : 09 Apr 2024 to 09 Apr 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the

documented procedures and using standard and instrument which are

recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius

Relative Humidity: 35-70%

Test Result : Refer to the test result(s) on page 2.

Remark: 1. Information of the sample description provided by the Applicant.

2. The result(s) relate only to the items tested or calibrated.

For and on behalf of HIGH PRECISION CHEMICAL TESTING LIMITED

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NT, Hong Kong

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

Application No. : HP00515

Certificate of Calibration

Measuring equipment

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

Test Result :

Reference value, dB	Indication value, dB	Deviation, dB	Allowed deviation, dB
94.0	94.1	+ 0.1	± 1.5
114.0	114.1	+ 0.1	± 1.5

Note

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