

## Certificate of Calibration - Wind Monitoring Station

Description: Yau Lai Estate, Bik Lai House  
 Manufacturer: Davis Instruments  
 Model No.: Davis7440  
 Serial No.: MC01010A44  
 Equipment No.: SA-03-04  
 Date of Calibration: 17-Feb-2025  
 Next Due Date: 17-Aug-2025

### 1. Performance check of Wind Speed

| Wind Speed, m/s         |                       | Difference D (m/s) |
|-------------------------|-----------------------|--------------------|
| Wind Speed Reading (V1) | Anemometer Value (V2) | $D = V1 - V2$      |
| 0.0                     | 0.0                   | 0.0                |
| 1.5                     | 1.4                   | 0.1                |
| 2.5                     | 2.4                   | 0.1                |
| 4.0                     | 3.8                   | 0.2                |

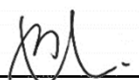
### 2. Performance check of Wind Direction

| Wind Direction (°)          |                           | 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              |

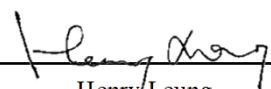
### Test Specification:

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: Davis Instruments  
Model No.: Davis7440  
Serial No.: MC01010A44  
Equipment No.: SA-03-04  
Date of Calibration 17-Aug-2025  
Next Due Date 17-Feb-2026

## 1. Performance check of Wind Speed

| Wind Speed, 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 Direction (°)          |                           | 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              |

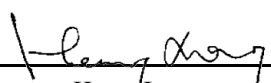
**Test Specification:**

- 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

## Calibration Certification Information

Cal. Date: January 7, 2025      Roots-meter 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 (m3)   | Qstd (x-axis) | $\sqrt{\Delta H \left( \frac{Pa}{Pstd} \right) \left( \frac{Tstd}{Ta} \right)}$ (y-axis) | Va        | Qa (x-axis) | $\sqrt{\Delta H \left( \frac{Ta}{Pa} \right)}$ (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                                                  |
| <b>QSTD</b> | m=            | <b>2.08969</b>                                                                           | <b>QA</b> | m=          | <b>1.30853</b>                                          |
|             | b=            | <b>-0.02374</b>                                                                          |           | b=          | <b>-0.01464</b>                                         |
|             | r=            | <b>0.99985</b>                                                                           |           | r=          | <b>0.99985</b>                                          |

## Calculations

|                                        |                                                                                                                       |     |                                                                                      |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|
| Vstd=                                  | $\Delta Vol((Pa-\Delta P)/Pstd)(Tstd/Ta)$                                                                             | Va= | $\Delta Vol((Pa-\Delta P)/Pa)$                                                       |
| 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= | $1/m \left( \left( \sqrt{\Delta H \left( \frac{Ta}{Pa} \right)} \right) - b \right)$ |

## Standard Conditions

Tstd: 298.15 °K  
Pstd: 760 mm Hg

## Key

ΔH: calibrator manometer reading (in H2O)  
ΔP: roots-meter 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

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0054

Project No. AM1 - Tin Hau Temple

Date: 13-Jun-25

Next Due Date: 13-Aug-25

Operator: SK

Equipment No.: A-01-05

Model No.: GS2310

Serial No. 10599

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <u>300.5</u> | Pressure, Pa (mmHg) | <u>754.4</u> |

| Orifice Transfer Standard Information |                 |                                                                          |                |               |                 |
|---------------------------------------|-----------------|--------------------------------------------------------------------------|----------------|---------------|-----------------|
| Serial No.                            | <u>3864</u>     | Slope, mc                                                                | <u>0.05914</u> | Intercept, bc | <u>-0.02377</u> |
| Last Calibration Date:                | <u>7-Jan-25</u> | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |                |               |                 |
| Next Calibration Date:                | <u>7-Jan-26</u> | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |                |               |                 |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <u>13.1</u>                        | <u>3.59</u>                                        | <u>61.12</u>           | <u>8.4</u>                     | <u>2.88</u>                                                  |
| 2                          | <u>10.2</u>                        | <u>3.17</u>                                        | <u>53.98</u>           | <u>6.2</u>                     | <u>2.47</u>                                                  |
| 3                          | <u>7.1</u>                         | <u>2.64</u>                                        | <u>45.10</u>           | <u>4.0</u>                     | <u>1.98</u>                                                  |
| 4                          | <u>5.1</u>                         | <u>2.24</u>                                        | <u>38.29</u>           | <u>2.6</u>                     | <u>1.60</u>                                                  |
| 5                          | <u>2.7</u>                         | <u>1.63</u>                                        | <u>27.97</u>           | <u>1.3</u>                     | <u>1.13</u>                                                  |

### By Linear Regression of Y on X

Slope, mw = 0.0530

Intercept, bw = -0.3891

Correlation coefficient\* = 0.9989

\*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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

$$\text{Therefore, Set Point; } W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) = \underline{\underline{3.63}}$$

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai

Signature:

Date: 13-Jun-25

Checked by: Henry Leung

Signature:

Date: 13-Jun-25

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/05/0055

Project No. AM1 - Tin Hau Temple

Date: 13-Aug-25 Next Due Date: 13-Oct-25 Operator: SK

Equipment No.: A-01-05 Model No.: GS2310 Serial No. 10599

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>303.1</b> | Pressure, Pa (mmHg) | <b>754.3</b> |

| Orifice Transfer Standard Information |          |                                                                          |         |               |          |
|---------------------------------------|----------|--------------------------------------------------------------------------|---------|---------------|----------|
| Serial No.                            | 3864     | Slope, mc                                                                | 0.05914 | Intercept, bc | -0.02377 |
| Last Calibration Date:                | 7-Jan-25 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |         |               |          |
| Next Calibration Date:                | 7-Jan-26 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |         |               |          |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>13.0</b>                        | 3.56                                               | 60.63                  | <b>7.8</b>                     | 2.76                                                         |
| 2                          | <b>10.0</b>                        | 3.12                                               | 53.22                  | <b>5.8</b>                     | 2.38                                                         |
| 3                          | <b>7.0</b>                         | 2.61                                               | 44.59                  | <b>3.8</b>                     | 1.93                                                         |
| 4                          | <b>5.0</b>                         | 2.21                                               | 37.75                  | <b>2.5</b>                     | 1.56                                                         |
| 5                          | <b>2.6</b>                         | 1.59                                               | 27.33                  | <b>1.3</b>                     | 1.13                                                         |

### By Linear Regression of Y on X

Slope, mw = 0.0496 Intercept, bw = -0.2675

Correlation coefficient\* = 0.9988

\*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                                              |  |
| $mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$                              |  |
| Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.57</u> |  |

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai Signature:  Date: 13-Aug-25

Checked by: Henry Leung Signature:  Date: 13-Aug-25

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0054

Project No. AM2 - Sai Tso Wan Recreation Ground

Date: 13-Jun-25 Next Due Date: 13-Aug-25 Operator: SK

Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <u>300.5</u> | Pressure, Pa (mmHg) | <u>754.4</u> |

| Orifice Transfer Standard Information |                 |                                                                          |                |               |                 |
|---------------------------------------|-----------------|--------------------------------------------------------------------------|----------------|---------------|-----------------|
| Serial No.                            | <u>3864</u>     | Slope, mc                                                                | <u>0.05914</u> | Intercept, bc | <u>-0.02377</u> |
| Last Calibration Date:                | <u>7-Jan-25</u> | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |                |               |                 |
| Next Calibration Date:                | <u>7-Jan-26</u> | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |                |               |                 |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <u>13.3</u>                        | <u>3.62</u>                                        | <u>61.58</u>           | <u>8.3</u>                     | <u>2.86</u>                                                  |
| 2                          | <u>10.3</u>                        | <u>3.18</u>                                        | <u>54.24</u>           | <u>6.4</u>                     | <u>2.51</u>                                                  |
| 3                          | <u>7.7</u>                         | <u>2.75</u>                                        | <u>46.95</u>           | <u>4.2</u>                     | <u>2.03</u>                                                  |
| 4                          | <u>5.0</u>                         | <u>2.22</u>                                        | <u>37.92</u>           | <u>2.4</u>                     | <u>1.54</u>                                                  |
| 5                          | <u>3.4</u>                         | <u>1.83</u>                                        | <u>31.34</u>           | <u>1.2</u>                     | <u>1.09</u>                                                  |

### By Linear Regression of Y on X

Slope, mw = 0.0587 Intercept, bw = -0.7210

Correlation coefficient\* = 0.9987

\*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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; W =  $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  3.31

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai Signature: [Signature] Date: 13-Jun-25

Checked by: Henry Leung Signature: [Signature] Date: 13-Jun-25

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/08/0055

Project No. AM2 - Sai Tso Wan Recreation Ground

Date: 13-Aug-25 Next Due Date: 13-Oct-25 Operator: SK

Equipment No.: A-01-08 Model No.: GS2310 Serial No. 1287

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>303.1</b> | Pressure, Pa (mmHg) | <b>754.3</b> |

| Orifice Transfer Standard Information |          |                                                                          |         |               |          |
|---------------------------------------|----------|--------------------------------------------------------------------------|---------|---------------|----------|
| Serial No.                            | 3864     | Slope, mc                                                                | 0.05914 | Intercept, bc | -0.02377 |
| Last Calibration Date:                | 7-Jan-25 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |         |               |          |
| Next Calibration Date:                | 7-Jan-26 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |         |               |          |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>13.5</b>                        | 3.63                                               | 61.77                  | <b>8.4</b>                     | 2.86                                                         |
| 2                          | <b>10.5</b>                        | 3.20                                               | 54.53                  | <b>6.5</b>                     | 2.52                                                         |
| 3                          | <b>7.8</b>                         | 2.76                                               | 47.05                  | <b>4.3</b>                     | 2.05                                                         |
| 4                          | <b>5.2</b>                         | 2.25                                               | 38.49                  | <b>2.5</b>                     | 1.56                                                         |
| 5                          | <b>3.5</b>                         | 1.85                                               | 31.65                  | <b>1.4</b>                     | 1.17                                                         |

### By Linear Regression of Y on X

Slope, mw = 0.0570 Intercept, bw = -0.6288

Correlation coefficient\* = 0.9993

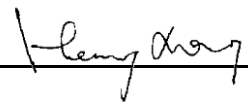
\*If Correlation Coefficient < 0.990, check and recalibrate.

| Set Point Calculation                                                                                 |  |
|-------------------------------------------------------------------------------------------------------|--|
| From the TSP Field Calibration Curve, take Qstd = 43 CFM                                              |  |
| From the Regression Equation, the "Y" value according to                                              |  |
| $mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$                              |  |
| Therefore, Set Point; W = $(mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.40</u> |  |

Remarks: \_\_\_\_\_

\_\_\_\_\_

Conducted by: Wong Shing Kwai Signature:  Date: 13-Aug-25

Checked by: Henry Leung Signature:  Date: 13-Aug-25



# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0054

Project No. AM3 - Yau Lai Estate, Bik Lai House

Date: 13-Jun-25

Next Due Date: 13-Aug-25

Operator: SK

Equipment No.: A-01-03

Model No.: GS2310

Serial No. 10379

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <u>300.5</u> | Pressure, Pa (mmHg) | <u>754.4</u> |

| Orifice Transfer Standard Information |                 |                                                                          |                |               |                 |
|---------------------------------------|-----------------|--------------------------------------------------------------------------|----------------|---------------|-----------------|
| Serial No.                            | <u>3864</u>     | Slope, mc                                                                | <u>0.05914</u> | Intercept, bc | <u>-0.02377</u> |
| Last Calibration Date:                | <u>7-Jan-25</u> | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |                |               |                 |
| Next Calibration Date:                | <u>7-Jan-26</u> | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |                |               |                 |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <u>13.0</u>                        | <u>3.58</u>                                        | <u>60.89</u>           | <u>8.4</u>                     | <u>2.88</u>                                                  |
| 2                          | <u>10.1</u>                        | <u>3.15</u>                                        | <u>53.72</u>           | <u>6.1</u>                     | <u>2.45</u>                                                  |
| 3                          | <u>7.3</u>                         | <u>2.68</u>                                        | <u>45.73</u>           | <u>4.2</u>                     | <u>2.03</u>                                                  |
| 4                          | <u>5.2</u>                         | <u>2.26</u>                                        | <u>38.66</u>           | <u>2.3</u>                     | <u>1.50</u>                                                  |
| 5                          | <u>3.1</u>                         | <u>1.75</u>                                        | <u>29.94</u>           | <u>1.3</u>                     | <u>1.13</u>                                                  |

### By Linear Regression of Y on X

Slope, mw = 0.0575

Intercept, bw = -0.6335

Correlation coefficient\* = 0.9973

\*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

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  3.43

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai

Signature:

Date: 13-Jun-25

Checked by: Henry Leung

Signature:

Date: 13-Jun-25



# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA16034/03/0055

Project No. AM3 - Yau Lai Estate, Bik Lai House

Date: 13-Aug-25 Next Due Date: 13-Oct-25 Operator: SK

Equipment No.: A-01-03 Model No.: GS2310 Serial No. 10379

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>303.1</b> | Pressure, Pa (mmHg) | <b>754.3</b> |

| Orifice Transfer Standard Information |          |                                                                          |         |               |          |
|---------------------------------------|----------|--------------------------------------------------------------------------|---------|---------------|----------|
| Serial No.                            | 3864     | Slope, mc                                                                | 0.05914 | Intercept, bc | -0.02377 |
| Last Calibration Date:                | 7-Jan-25 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |         |               |          |
| Next Calibration Date:                | 7-Jan-26 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |         |               |          |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>13.2</b>                        | 3.59                                               | 61.09                  | <b>8.5</b>                     | 2.88                                                         |
| 2                          | <b>10.3</b>                        | 3.17                                               | 54.01                  | <b>6.2</b>                     | 2.46                                                         |
| 3                          | <b>7.4</b>                         | 2.69                                               | 45.84                  | <b>4.0</b>                     | 1.98                                                         |
| 4                          | <b>5.5</b>                         | 2.32                                               | 39.57                  | <b>2.5</b>                     | 1.56                                                         |
| 5                          | <b>3.3</b>                         | 1.79                                               | 30.74                  | <b>1.4</b>                     | 1.17                                                         |

### By Linear Regression of Y on X

Slope, mw = 0.0574 Intercept, bw = -0.6445

Correlation coefficient\* = 0.9981

\*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                                              |  |
| $mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$                              |  |
| Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.40</u> |  |

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai Signature:  Date: 13-Aug-25

Checked by: Henry Leung Signature:  Date: 13-Aug-25

# High-Volume TSP Sampler

## 5-POINT CALIBRATION DATA SHEET



File No. MA20003/55/033

Project No. CKL 2 - Flat 103 Cha Kwo Ling Village

Date: 4-Jul-25 Next Due Date: 4-Sep-25 Operator: SK

Equipment No.: A-01-55 Model No.: TE 5170 Serial No. 1956

| Ambient Condition   |              |                     |              |
|---------------------|--------------|---------------------|--------------|
| Temperature, Ta (K) | <b>303.8</b> | Pressure, Pa (mmHg) | <b>754.1</b> |

| Orifice Transfer Standard Information |          |                                                                          |         |               |          |
|---------------------------------------|----------|--------------------------------------------------------------------------|---------|---------------|----------|
| Serial No.                            | 3864     | Slope, mc                                                                | 0.05914 | Intercept, bc | -0.02377 |
| Last Calibration Date:                | 7-Jan-25 | $mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ |         |               |          |
| Next Calibration Date:                | 7-Jan-26 | $Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$  |         |               |          |

| Calibration of TSP Sampler |                                    |                                                    |                        |                                |                                                              |
|----------------------------|------------------------------------|----------------------------------------------------|------------------------|--------------------------------|--------------------------------------------------------------|
| Calibration Point          | Orifice                            |                                                    |                        | HVS                            |                                                              |
|                            | $\Delta H$ (orifice), in. of water | $[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$ | Qstd (CFM)<br>X - axis | $\Delta W$ (HVS), in. of water | $[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$<br>Y-axis |
| 1                          | <b>13.4</b>                        | 3.61                                               | 61.47                  | <b>9.1</b>                     | 2.98                                                         |
| 2                          | <b>11.2</b>                        | 3.30                                               | 56.23                  | <b>7.2</b>                     | 2.65                                                         |
| 3                          | <b>9.3</b>                         | 3.01                                               | 51.27                  | <b>5.5</b>                     | 2.31                                                         |
| 4                          | <b>5.1</b>                         | 2.23                                               | 38.07                  | <b>2.6</b>                     | 1.59                                                         |
| 5                          | <b>3.7</b>                         | 1.90                                               | 32.49                  | <b>2.0</b>                     | 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                                              |  |
| $mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$                              |  |
| Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.76</u> |  |

Remarks: \_\_\_\_\_

Conducted by: Wong Shing Kwai Signature: [Signature] Date: 4-Jul-25

Checked by: Henry Leung Signature: [Signature] Date: 4-Jul-25

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

|                                |                                          |                                |                               |
|--------------------------------|------------------------------------------|--------------------------------|-------------------------------|
| Description:                   | <u>Laser Dust Monitor</u>                | Date of Calibration            | <u>30-Jul-25</u>              |
| Manufacturer:                  | <u>Sibata Scientific Technology LTD.</u> | Validity of Calibration Record | <u>30-Sep-25</u>              |
| Model No.:                     | <u>LD-3B</u>                             |                                |                               |
| Serial No.:                    | <u>2Y6194</u>                            |                                |                               |
| Equipment No.:                 | <u>SA-01-02</u>                          | Sensitivity                    | <u>0.001 mg/m<sup>3</sup></u> |
| High Volume Sampler No.:       | <u>A-01-03</u>                           | Before Sensitivity Adjustment  | <u>578</u>                    |
| Tisch Calibration Orifice No.: | <u>3864</u>                              | After Sensitivity Adjustment   | <u>578</u>                    |

| Calibration of 1 hr TSP |                    |                          |                                                   |
|-------------------------|--------------------|--------------------------|---------------------------------------------------|
| Calibration Point       | Laser Dust Monitor |                          | HVS                                               |
|                         | Total Count        | Count / Minute<br>X-axis | Mass concentration (µg/m <sup>3</sup> )<br>Y-axis |
| 1                       | 4000               | 76.0                     | 143.0                                             |
| 2                       | 3600               | 64.0                     | 115.0                                             |
| 3                       | 3000               | 53.0                     | 104.0                                             |
| Average                 |                    | 64.3                     | 120.7                                             |

By Linear Regression of Y on X

Slope, mw = 1.7053      Intercept, bw = 10.9597

Correlation coefficient\* = 0.9756

Set Correlation Factor, SCF

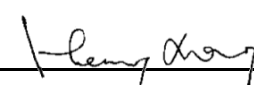
SCF = [ K=High Volume Sampler / Dust Meter, ( µ g/m<sup>3</sup>) ]      1.9

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 Limited)

Calibrated by:   
Technical Officer (Wong Shing Kwai)

Approved by:   
Project Manager (Henry Leung)

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 8Y2374  
 Equipment No.: SA-01-04 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 652  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 652

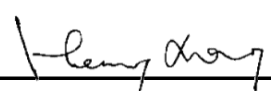
| Calibration of 1 hr TSP                                                                                                                |                                                           |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                      | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                        | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                      | 76.0                                                      | 130.0                                                     |
| 2                                                                                                                                      | 67.0                                                      | 122.0                                                     |
| 3                                                                                                                                      | 52.0                                                      | 103.0                                                     |
| Average                                                                                                                                | 65.0                                                      | 118.3                                                     |
| By Linear Regression of Y on X<br>Slope, mw = <u>1.1395</u> Intercept, bw = <u>44.2687</u><br>Correlation coefficient* = <u>0.9962</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                 |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                          |                                                           | 118.3                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                   |                                                           | 65.0                                                      |
| Measuring time, (min)                                                                                                                  |                                                           | 60.0                                                      |
| Set Correlation Factor, SCF                                                                                                            |                                                           |                                                           |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]                                                             |                                                           | <u>1.8</u>                                                |

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 Limited)

Calibrated by:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 8Y2373  
 Equipment No.: SA-01-05 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 657  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 657

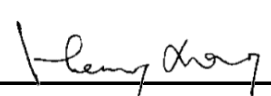
| Calibration of 1 hr TSP                                                                                                                         |                                                           |                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                               | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                                 | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                               | 72.0                                                      | 133.0                                                     |
| 2                                                                                                                                               | 64.0                                                      | 114.0                                                     |
| 3                                                                                                                                               | 56.0                                                      | 101.0                                                     |
| Average                                                                                                                                         | 64.0                                                      | 116.0                                                     |
| <b>By Linear Regression of Y on X</b><br>Slope , mw = <u>2.0000</u> Intercept, bw = <u>-12.0000</u><br>Correlation coefficient* = <u>0.9942</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                          |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                                   |                                                           | 116.0                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                            |                                                           | 64.0                                                      |
| Measureing time, (min)                                                                                                                          |                                                           | 60.0                                                      |
| Set Correlation Factor , SCF<br>SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ] <u>1.8</u>                           |                                                           |                                                           |

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:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 972777  
 Equipment No.: SA-01-06 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 645  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 645

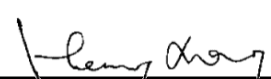
| Calibration of 1 hr TSP                                                                                                                      |                                                           |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                            | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                              | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                            | 76.0                                                      | 135.0                                                     |
| 2                                                                                                                                            | 56.0                                                      | 115.0                                                     |
| 3                                                                                                                                            | 52.0                                                      | 108.0                                                     |
| Average                                                                                                                                      | 61.3                                                      | 119.3                                                     |
| By Linear Regression of Y on X<br>Slope, $m_w =$ <u>1.0847</u> Intercept, $b_w =$ <u>52.8065</u><br>Correlation coefficient* = <u>0.9954</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                       |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                                |                                                           | 119.3                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                         |                                                           | 61.3                                                      |
| Measuring time, (min)                                                                                                                        |                                                           | 60.0                                                      |
| Set Correlation Factor, SCF<br>SCF = [ $K = \text{High Volume Sampler} / \text{Dust Meter, } (\mu\text{g}/\text{m}^3)$ ] <u>1.9</u>          |                                                           |                                                           |

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 Limited)

Calibrated by:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 972778  
 Equipment No.: SA-01-07 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 735 CPM  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 735 CPM

| Calibration of 1 hr TSP                                                                                                                |                                                           |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                      | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                        | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                      | 75.0                                                      | 141.0                                                     |
| 2                                                                                                                                      | 63.0                                                      | 118.0                                                     |
| 3                                                                                                                                      | 52.0                                                      | 105.0                                                     |
| Average                                                                                                                                | 63.3                                                      | 121.3                                                     |
| By Linear Regression of Y on X<br>Slope, mw = <u>1.5705</u> Intercept, bw = <u>21.8665</u><br>Correlation coefficient* = <u>0.9910</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                 |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                          |                                                           | 121.3                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                   |                                                           | 63.3                                                      |
| Measuring time, (min)                                                                                                                  |                                                           | 60.0                                                      |
| Set Correlation Factor, SCF                                                                                                            |                                                           |                                                           |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]                                                             |                                                           | <u>1.9</u>                                                |

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 Limited)

Calibrated by:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)



**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 972780  
 Equipment No.: SA-01-09 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 739 CPM  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 739 CPM

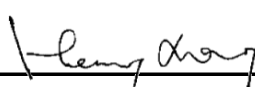
| Calibration of 1 hr TSP                                                                                                                     |                                                           |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                           | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                             | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                           | 76.0                                                      | 134.0                                                     |
| 2                                                                                                                                           | 62.0                                                      | 113.0                                                     |
| 3                                                                                                                                           | 56.0                                                      | 100.0                                                     |
| Average                                                                                                                                     | 64.7                                                      | 115.7                                                     |
| By Linear Regression of Y on X<br>Slope, $m_w =$ <u>1.6646</u> Intercept, $b_w =$ <u>8.0253</u><br>Correlation coefficient* = <u>0.9958</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                      |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                               |                                                           | 115.7                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                        |                                                           | 64.7                                                      |
| Measuring time, (min)                                                                                                                       |                                                           | 60.0                                                      |
| Set Correlation Factor, SCF                                                                                                                 |                                                           |                                                           |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]                                                                  |                                                           | <u>1.8</u>                                                |

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 Limited)

Calibrated by:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)

**Certificate of Calibration**

It is certified that the item under calibration has been calibrated by corresponding calibrated High Volume Sampler

Description: Digital Dust Indicator Date of Calibration 30-Jul-25  
 Manufacturer: Sibata Scientific Technology LTD. Validity of Calibration Record 30-Sep-25  
 Model No.: LD-5R  
 Serial No.: 972781  
 Equipment No.: SA-01-10 Sensitivity 0.001 mg/m3  
 High Volume Sampler No.: A-01-03 Before Sensitivity Adjustment 734 CPM  
 Tisch Calibration Orifice No.: 3864 After Sensitivity Adjustment 734 CPM

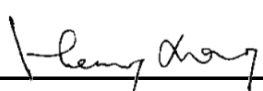
| Calibration of 1 hr TSP                                                                                                                |                                                           |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Calibration Point                                                                                                                      | Laser Dust Monitor                                        | HVS                                                       |
|                                                                                                                                        | Mass Concentration ( $\mu\text{g}/\text{m}^3$ )<br>X-axis | Mass concentration ( $\mu\text{g}/\text{m}^3$ )<br>Y-axis |
| 1                                                                                                                                      | 75.0                                                      | 132.0                                                     |
| 2                                                                                                                                      | 66.0                                                      | 115.0                                                     |
| 3                                                                                                                                      | 55.0                                                      | 101.0                                                     |
| Average                                                                                                                                | 65.3                                                      | 116.0                                                     |
| By Linear Regression of Y on X<br>Slope, mw = <u>1.5399</u> Intercept, bw = <u>15.3953</u><br>Correlation coefficient* = <u>0.9936</u> |                                                           |                                                           |
| Set Correlation Factor                                                                                                                 |                                                           |                                                           |
| Particulate Concentration by High Volume Sampler ( $\mu\text{g}/\text{m}^3$ )                                                          |                                                           | 116.0                                                     |
| Particulate Concentration by Dust Meter ( $\mu\text{g}/\text{m}^3$ )                                                                   |                                                           | 65.3                                                      |
| Measuring time, (min)                                                                                                                  |                                                           | 60.0                                                      |
| Set Correlation Factor, SCF                                                                                                            |                                                           |                                                           |
| SCF = [ K=High Volume Sampler / Dust Meter, ( $\mu\text{g}/\text{m}^3$ ) ]                                                             |                                                           | <u>1.8</u>                                                |

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 Limited)

Calibrated by:   
 Technical Officer (Wong Shing Kwai)

Approved by:   
 Project Manager (Henry Leung)

**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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

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.  | 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**

Lee Wai Kit  
Laboratory Manager

## **High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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



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.

- End of report -

**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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

Report No. : 01015

Issue Date : 04 Feb 2025

Application No. : HP00868

**Certificate of Calibration**

Applicant : Cinotech Consultants Limited  
RM 1710, Technology Park,  
18 On Lai Street,  
Shatin, N.T., Hong Kong

Sample Description : Submitted equipment stated to be Sound Level Calibrator.

Equipment No.: : N-16-02

Manufacturer: : Hangzhou Aihua Instruments Co., Ltd.

Other information :

|            |          |
|------------|----------|
| Model No.  | AWA6021A |
| Serial No. | 1023064  |

Date Received : 28 Jan 2025

Test Period : 03 Feb 2025 to 04 Feb 2025

Test Requested : Performance checking for Sound Level Calibrator

Test Method : The Sound Level Meter and Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius  
Relative Humidity: 35-70%

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

Remark : 1. Information of the sample description provided by the Applicant.  
2. The result(s) relate only to the items tested or calibrated.

***For and on behalf of***  
**HIGH PRECISION CHEMICAL TESTING LIMITED**

Lee Wai Kit  
Laboratory Manager

**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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

Report No. : 01015

Issue Date : 04 Feb 2025

Application No. : HP00868

**Certificate of Calibration**Measuring  
equipment

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

|                |             |
|----------------|-------------|
| Description    | Sound Meter |
| Manufacturer   | SVANTEK     |
| Model No.      | SVAN 977    |
| Serial No.     | 92677       |
| Microphone No. | 10352       |
| Equipment No.  | N-14-01     |

Test Result :

| Reference value, dB | Indication value, dB | Deviation, dB | Allowed deviation, dB |
|---------------------|----------------------|---------------|-----------------------|
| 94.0                | 94.2                 | + 0.2         | ± 0.3                 |
| 114.0               | 114.3                | + 0.3         | ± 0.5                 |

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

- End of report -

**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

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NT, Hong Kong

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

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**

Lee Wai Kit  
Laboratory Manager

## **High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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



Report No. : 00870

Issue Date : 14 Oct 2024

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                 | $\pm 0.0$     | $\pm 1.5$             |
| 114.0               | 114.2                | + 0.2         | $\pm 1.5$             |

- 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.

- End of report -



**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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

Report No. : 00871

Issue Date : 14 Oct 2024

Application No. : HP00732

**Certificate of Calibration**

Applicant : Cinotech Consultants Limited  
RM 1710, Technology Park,  
18 On Lai Street,  
Shatin, N.T., Hong Kong

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

Equipment No.: : N-12-02

Manufacturer: : BSWA Technology

Other information :

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

Date Received : 07 Oct 2024

Test Period : 09 Oct 2024 to 09 Oct 2024

Test Requested : Performance checking for Sound Level Meter

Test Method : The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard and instrument which are recommended by the manufacturer, or equivalent.

Test conditions : Room Temperature: 22-25 degree Celsius  
Relative Humidity: 35-70%

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

Remark : 1. Information of the sample description provided by the Applicant.  
2. The result(s) relate only to the items tested or calibrated.

***For and on behalf of***  
**HIGH PRECISION CHEMICAL TESTING LIMITED**

Lee Wai Kit  
Laboratory Manager

## **High Precision Chemical Testing Ltd.**

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



Report No. : 00871

Issue Date : 14 Oct 2024

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.

- End of report -

**High Precision Chemical Testing Ltd.**

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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**

Lee Wai Kit  
Laboratory Manager

**High Precision Chemical Testing Ltd.**

Rm 1904, Technology Park

18 On Lai Street, Shatin

NT, Hong Kong

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

Report No. : 01074

Issue Date : 19 Mar 2025

Application No. : HP00912

**Certificate of Calibration**Measuring  
equipment

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

Test Result :

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

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

- End of report -

## **High Precision Chemical Testing Ltd.**

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**

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.      | 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***

Lee Wai Kit  
Laboratory Manager

## **High Precision Chemical Testing Ltd.**

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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.

- End of report -