

Mettler Toledo LabTec  
Service LabTec  
Im Langacher 44  
8606 Greifensee  
N/A

# Certificate Japanese Pharmacopoeia General Tests 9.62 Measuring Instruments, Appliances, "Balances and Weights"

## Customer

Company: Sample Customer  
Address: Sample Address  
City: Sample City Contact: N/A  
Zip/Postal: Sample Order Number: N/A  
State/Province: Sample State

## Weighing Device

Manufacturer: Mettler Toledo Instrument Type: Weighing Instrument  
Model: XPE205DR Asset Number: 2452354231  
Serial No.: 20161101\_1 Alternate Asset No.: 12344324234  
Building: GD Terminal Model: N/A  
Floor: 700 Terminal Serial No.: N/A  
Room: GD731 Terminal Asset No.: N/A

| Range | Max. Capacity | Readability (d) |
|-------|---------------|-----------------|
| 1     | 81 g          | 0.00001 g       |
| 2     | 220 g         | 0.0001 g        |

## Procedure

Reference Document: Japanese Pharmacopoeia General Test Methods 9.6 Weighing Instruments/Equipment Scales (Balances) and Weights

METTLER TOLEDO Work Instruction: Pharmacopoeia Certificate WI 10000027820

This certificate contains measurements for As Found and As Left tests.

As Found Test Date: 28-May-2024 Service Technician:  
As Left Test Date: 28-May-2024  
Issue Date: 28-May-2024 Service Technician  
Next Test Date: 31-May-2025

## Summary of Results

| Repeatability   |                     |           | As Found   | As Left    |
|-----------------|---------------------|-----------|------------|------------|
| Test            | Smallest Net Weight | Tare Load | Assessment | Assessment |
| RP_SNW_0.50000g | 0.50000 g           | N/A       | ✓          | ✓          |
| Accuracy        |                     |           | As Found   | As Left    |
| Sensitivity     |                     |           | ✓          | ✓          |

## Measurement Results

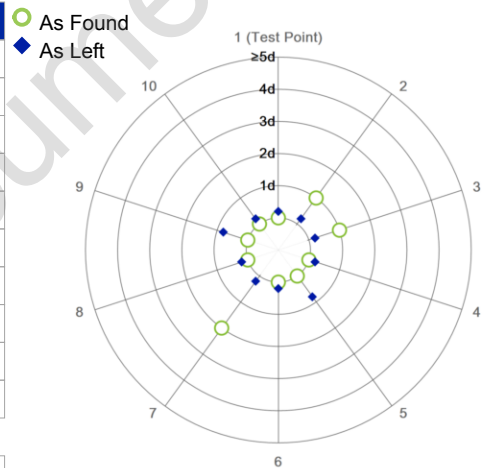
### Repeatability

RP\_SNW\_0.50000g

|                      |           |                          |     |
|----------------------|-----------|--------------------------|-----|
| Smallest Net Weight: | 0.50000 g | Tare Vessel ID:          | N/A |
| Test Load:           | 200 g     | Tare Vessel Description: | N/A |
| Tare Load:           | N/A       |                          |     |

|    | As Found   | As Left    |
|----|------------|------------|
| 1  | 200.0000 g | 200.0000 g |
| 2  | 199.9999 g | 200.0000 g |
| 3  | 199.9999 g | 200.0000 g |
| 4  | 200.0000 g | 200.0000 g |
| 5  | 200.0000 g | 199.9999 g |
| 6  | 200.0000 g | 200.0000 g |
| 7  | 200.0002 g | 200.0000 g |
| 8  | 200.0000 g | 200.0000 g |
| 9  | 200.0000 g | 199.9999 g |
| 10 | 200.0000 g | 200.0000 g |

|                             |             |             |
|-----------------------------|-------------|-------------|
| Mean Value                  | 200.00000 g | 199.99998 g |
| Standard Deviation          | 0.00008 g   | 0.00004 g   |
| Calculation <sup>1</sup>    | 0.0327 %    | 0.0169 %    |
| Assessment <sup>2</sup>     | 0.03 % ✓    | 0.02 % ✓    |
| Requirement                 | 0.10 %      | 0.10 %      |
| Minimum Weight <sup>3</sup> | 0.16330 g   | 0.08433 g   |



The "d" in the graph represents the readability of the range/interval in which the test was performed. The results of this graph are based upon the absolute values of the differences from the mean value.

<sup>1</sup> The following value is calculated:  $2 * \text{standard deviation} / \text{smallest net weight}$ . If the standard deviation  $s$  is smaller than the rounding error of  $0.41*d$  where  $d$  is the readability of the range/interval in which the test was performed, then  $s$  is replaced by  $0.41*d$ .

<sup>2</sup> The assessment is carried out after the calculated value is mathematically rounded to the readability of the requirement of 0.10 %.

<sup>3</sup> Minimum weight =  $2000 * s$ . If the calculated standard deviation  $s$  is smaller than the rounding error of  $0.41*d$  where  $d$  is the readability of the range/interval in which the test was performed, then  $s$  is replaced by  $0.41*d$ . In this case, minimum weight =  $2000 * 0.41 * d$ .

All intermediate calculations are performed in the software to 16 decimal places.

## Accuracy

### Sensitivity

|                               | As Found          | As Left           |
|-------------------------------|-------------------|-------------------|
| Test Load                     | 200 g             | 200 g             |
| CMV                           | 200.0000 g        | 200.0000 g        |
| Indication                    | 200.0002 g        | 200.0000 g        |
| <b>Deviation <sup>1</sup></b> | <b>0.0002 g</b> ✓ | <b>0.0000 g</b> ✓ |
| <b>Requirement</b>            | <b>0.1000 g</b>   | <b>0.1000 g</b>   |

<sup>1</sup> The sensitivity test is passed if the absolute value of the deviation  $\leq 0.05\%$  of the test load value. The requirement for the assessment of sensitivity is  $0.05\%$ . This ensures adherence to the overall accuracy requirement of  $0.10\%$  because other balance properties might also limit the accuracy of the instrument.

## Reference Weights

All weights used for metrological testing are traceable to national or international standards. The weights were calibrated and certified by an accredited calibration laboratory.

### Weight Set 1: OIML E<sub>2</sub>

|                            |         |                              |             |
|----------------------------|---------|------------------------------|-------------|
| <b>Weight Set No.:</b>     | E2 2013 | <b>Date of Issue:</b>        | 24-Jul-2013 |
| <b>Certificate Number:</b> | 1234567 | <b>Calibration Due Date:</b> | 21-Jun-2025 |

## Remarks

The user is responsible for maintaining the configuration (settings) of the balance which was used when the assessment was performed.

This document is issued to record completion of the work performed by METTLER TOLEDO on the subject device in accordance with agreed standards. It does not guarantee the continued performance of the subject device. Any measurements recorded are based on the subject device's performance at a given time as tested by METTLER TOLEDO and, except where explicitly stated otherwise, do not express an opinion as to the sufficiency of any customer designed procedures used to test the device. This document is not a warranty, either implied or express. METTLER TOLEDO expressly disclaims any liability arising from the use of the information in this document for any purpose other than as specified herein.