

|                                     |                                                                               |               |           |                          |                   |
|-------------------------------------|-------------------------------------------------------------------------------|---------------|-----------|--------------------------|-------------------|
| Balance ID no:                      | HC-105                                                                        | Location:     | New Pilod | Operating Range:         | 0.0100-209.0000 g |
| Balance Capacity:                   | 0.0001 g                                                                      | Least Count : | 0.0001 g  | Calibration Frequency    | 12 months         |
| Weight Box / Standard Weight ID No. | HSW-07                                                                        |               |           | Valid Upto:              | 03/09/26          |
| Date of Calibration:                | 01/08/26                                                                      |               |           | Next Calibration Due on: | 01/08/27          |
| Reason for Calibration              | <input type="checkbox"/> Schedule <input type="checkbox"/> Non Schedule _____ |               |           |                          |                   |

## 1. Surface level check

| Surface level check                                                                                    | Observation  |
|--------------------------------------------------------------------------------------------------------|--------------|
| Check the surface level on the level (Bubble) indicator and ensure that the bubble should be in Center | Satisfactory |
| Calibration Done By : 4006(Sheetal)                                                                    |              |

## 2. Sensitivity and Linearity

| Weight Selection for calibration   | Selected weights | Acceptance Criteria                                                                      | Actual Observation (Center position)                                                                                                                                           |            |
|------------------------------------|------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Minimum of Entire operation range  | 0.0100 g         | Actual weight = ± 0.5 % of Selected standard Weight (For Dispensing activity)            | 0.0100 g                                                                                                                                                                       |            |
| 30% of Balance capacity            | 66.0000 g        |                                                                                          | Actual weight = ± 0.1 % of actual mass * of Selected standard weight (For Dispensing activity for balance having capacity 220 g or below with least count 0.00001 g or better) | 66.0000 g  |
| 50% of Balance capacity            | 110.0000 g       |                                                                                          |                                                                                                                                                                                | 110.0000 g |
| 80% of Balance capacity            | 176.0000 g       |                                                                                          |                                                                                                                                                                                | 176.0000 g |
| Maximum of Entire operating range  | 209.0000 g       | Actual weight = ± 1.0 % of Selected standard weight (For other than Dispensing activity) | 209.0000 g                                                                                                                                                                     |            |
| Calibration done By :              |                  | 4006(Sheetal)                                                                            |                                                                                                                                                                                |            |
| * Actual mass of standard weights: |                  |                                                                                          |                                                                                                                                                                                |            |

## 3. Eccentricity test

| Weight Selection for calibration    | Selected weights | Acceptance Criteria                                                                                                                                                                                                                                                                                                                                                 | Actual Observation |            |
|-------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|
| 50% of Balance capacity             | 110 g            | Actual weight = ± 0.5 % of Selected standard Weight (For Dispensing activity)<br><br>Actual weight = ± 0.1 % of actual mass * of Selected standard weight (For Dispensing activity for balance having capacity 220 g or below with least count 0.00001 g or better)<br><br>Actual weight = ± 1.0 % of Selected standard weight (For other than Dispensing activity) | 1 Position         | 110.0000 g |
|                                     |                  |                                                                                                                                                                                                                                                                                                                                                                     | 2 Position         | 110.0000 g |
|                                     |                  |                                                                                                                                                                                                                                                                                                                                                                     | 3 Position         | 110.0000 g |
|                                     |                  |                                                                                                                                                                                                                                                                                                                                                                     | 4 Position         | 110.0000 g |
|                                     |                  |                                                                                                                                                                                                                                                                                                                                                                     | Center             | 110.0000 g |
| Calibration done By :               |                  |                                                                                                                                                                                                                                                                                                                                                                     | 4006(Sheetal)      |            |
| * Actual mass of standard weights : |                  |                                                                                                                                                                                                                                                                                                                                                                     |                    |            |

## 4. Repeatability test

| Weight Selection<br>for calibration                                           | Selected<br>weights | Acceptance Criteria                                                     | Actual<br>Observation<br>(Center Position) |
|-------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------|--------------------------------------------|
| 5% of Balance<br>capacity                                                     | 11.0000<br>g        | Measurement uncertainty (repeatability) shall not be more than<br>0.002 | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
|                                                                               |                     |                                                                         | 11.0000 g                                  |
| Mean                                                                          |                     |                                                                         | 11.0000 g                                  |
| Standard Deviation                                                            |                     |                                                                         | 0.0000                                     |
| Value of 0.41d                                                                |                     |                                                                         | 0.000041                                   |
| *Repeatability = Standard deviation or 0.41 d × 2/Nominal value of the weight |                     |                                                                         | 0.00001                                    |
| Calibration done By :                                                         |                     |                                                                         | 4006(Sheetal)                              |

**Note :** For balance having minimum operating range 310 gm or less than 310 gm in this case calculated standard deviation of 10 replicate measurement is smaller than  $0.41d(0.41 \times \text{Readability(Scale Interval)})$  value then replace the standard deviation value with 0.41d value.

Where "d" is the scale interval (Readability) of balance.

Other balances which have more than 310 g range for that, only SD \* count instead of  $0.41 \times d$  wheather if  $0.41 \times d$  value more than SD.

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

**Conclusion :** The Calibration of instrument found satisfactory / Not satisfactory

**Done By/ Date:** 4006(Sheetal) / 01/08/26

**Verified By / Date:** 4001(Rahul) / 01/08/26