

# **Calibration Certificate**

This is to certify that **ADVIA Centaur XP S No. IRL41811338** installed at Apollo Health and Lifestyle, Hyderabad, has been **calibrated on 11<sup>th</sup> February 2023** and the same was verified with the following tests.

# Luminometer

|               | Well 1 | Well 2  | Well 3 | Well 4 | Well 5  | Well 6 | Well 7 | Well 8 |
|---------------|--------|---------|--------|--------|---------|--------|--------|--------|
| RLU 1         |        | 24      | 21     | 21     | 24      | 21     | 26     | 24     |
| RLU 2         | 16     | 19      | 20     | 16     | 16      | 19     | 20     | 28     |
| RLU 3         | 25     | 27      | 24     | 22     | 18      | 14     | 23     | 21     |
| Mean          | 20.00  | 23.33   | 21.67  | 19.67  | 19.33   | 18.00  | 23.00  | 24.33  |
| SD            | 4.58   | 4.04    | 2.08   | 3.21   | 4.16    | 3.61   | 3.00   | 3.51   |
| CV            | 22.91  | 17.32   | 9.61   | 16.35  | 21.53   | 20.03  | 13.04  | 14.43  |
| Total Results |        | Results |        |        | Remarks |        |        |        |
| Mean          |        |         | 21.17  |        |         | Passed |        |        |
| SD            |        |         | 3.69   |        |         | Passed |        |        |
| CV            |        |         | 17.44  |        |         | Passed |        |        |

### Dark Count Results without Cuvette

# Dark Count with Cuvette

|               | Well 1 | Well 2  | Well 3 | Well 4 | Well 5  | Well 6 | Well 7 | Well 8 |
|---------------|--------|---------|--------|--------|---------|--------|--------|--------|
| RLU 1         | 29     | 25      | 20     | 21     | 23      | 28     | 16     | 24     |
| RLU 2         | 23     | 18      | 28     | 21     | 25      | 21     | 18     | 19     |
| RLU 3         | 22     | 30      | 17     | 24     | 19      | 18     | 25     | 31     |
| Mean          | 24.67  | 24.33   | 21.67  | 22.00  | 22.33   | 22.33  | 19.67  | 24.67  |
| SD            | 3.79   | 6.03    | 5.69   | 1.73   | 3.06    | 5.13   | 4.73   | 6.03   |
| CV            | 15.35  | 24.77   | 26.24  | 7.87   | 13.68   | 22.98  | 24.03  | 24.44  |
| Total Results |        | Results |        |        | Remarks |        |        |        |
| Mean          |        |         | 22.71  |        |         | Passed |        |        |
| CV            |        |         | 18.93  |        |         | Passed |        |        |
| SD            |        |         | 4.30   |        |         | Passed |        |        |



# **Thermal Operations**

| Module            | Tolerance | Equilibrate | Remarks  |
|-------------------|-----------|-------------|----------|
| Incubation Ring A | In        | In          | Verified |
| Incubation Ring B | In        | In          | Verified |
| Incubation Ring C | In        | In          | Verified |
| Incubation Ring D | In        | In          | Verified |
| Pre Heater        | In        | In          | Verified |
| PMT               | In        | In          | Verified |
| Primary Reagent A | In        | In          | Verified |
| Primary Reagent B | In        | In          | Verified |
| Primary Reagent C | In        | In          | Verified |
| Ancillary Queue   | In        | In          | Verified |
| Reagent Probe 1   | In        | In          | Verified |
| Reagent Probe 2   | In        | In          | Verified |
| Reagent Probe 3   | In        | In          | Verified |



#### Data Sheet

| Wash Station Position     | Syringe Size | Volume Dispensed | Expected Range    |  |
|---------------------------|--------------|------------------|-------------------|--|
| Dispense Port1&Aspirate1  | 5 mL         | 5.00 mL          | 4.85 mL – 5.15 mL |  |
| Dispense Port 2&Aspirate2 | 5 mL         | 5.10 mL          | 4.85 mL – 5.15 mL |  |
| WD & Aspirate 3           | 5 mL         | 490 mL           | 4.85 mL – 5.15 mL |  |
| Dispense Port3&Aspirate4  | 5 mL         | 4.95 mL          | 4.85 mL – 5.15 mL |  |
| Resuspend & Waste         | 2 mL         | 2.05 mL          | 1.85 mL – 2.15 mL |  |
| Acid Pump                 |              | 3.00 mL          | 2.9 mL – 3.1 mL   |  |
| Base Pump                 |              | 3.00 mL          | 2.9 mL – 3.1 mL   |  |

# Verified the Calibrations and alignment of Robotics visually

Calibration of the instrument was carried out as per the recommendation. Checked all voltages of the instrument and found in range with Digital Multi Meter, calibration parameters and performance tests are found within range.

Next Calibration will be performed on 10<sup>th</sup> August 2023

**Siemens Healthineers** 

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