



# **ELx808™ IU and RIU Microplate Reader Preventative Maintenance Overview**

## ELx808™ IU and RIU Microplate Reader Preventative Maintenance Overview

The following steps will be completed in accordance with Lonza Walkersville, Inc. Field Service Preventative Maintenance Procedure for the ELx808™ IU and RIU Microplate Reader (USWV-5176) and Field Service Performance Verification for the ELx808™ IU and RIU Microplate Reader (USWV-5177).

| Task                            | Description   |
|---------------------------------|---|
| Checksum Test                   | Verifies the firmware is the recommended version  |
| Empty Carrier Test              | Ensures proper communication with the reader, checks for background optical noise   |
| System Self-Test                | Verifies performance of the filters, lamp, optical sensors and temperature of the four incubation zones   |
| Optical Density Validation Test | Verifies reader linearity, channel-to-channel variability, and column-to-column reproducibility   |
| Absorbance Plate Test           | Verifies alignment and operation of the plate carrier and related components, and optical performance (accuracy and repeatability) as compared to a NIST traceable standard |
| Uniformity Test                 | Verifies the uniformity of the assay environment across the entire 96-well microplate (an optional temperature plate test may be offered in some regions)                   |
| General Maintenance             | Lamp replacement, cleaning, optical path test, and part replacements as needed to maintain optimal functioning  |

Performance Verification Procedures will be conducted with the Lonza Service Engineer's laptop computer and the most current version of the WinKQCL® Software, unless otherwise requested\*. An engineer signed service report PDF is provided upon completion following Lonza's SOP (USWV-24668).

**Please note:** Reagents and consumables are not provided by Lonza. The customer should ensure the following reagents and consumables are available:

- 1 x Kinetic-Chromogenic LAL Assay kit (P/N 50-650U) OR Kinetic-Turbidimetric LAL Assay kit (P/N N383)
- 1 x LAL Reagent Water (P/N W50-100)
- 1 x LAL Reagent Grade Multi-well Plates (P/N 25-340, 50/box)
- 2 x Pyrogen-free Dilution Tubes (P/N N207, 30/pack)
- 2 x LAL Reagent Reservoirs (P/N 00190035, 10/pack)
- Lonza Stepped Neutral Density (SND) Plate
- Absorbance Test Plate (6 OD Filters)
- Additional equipment required:
  - A full set of micropipettes and compatible endotoxin tested tips (ideally not used for other microbiology work to avoid cross contamination)
    - 10 µL/100 µL/1000 µL variable single channel pipettes
    - 8 channel 100 µL pipette
  - Vortex mixer able to vortex vigorously
  - Test tube rack to hold dilution tubes
  - Discard facilities

**Cancellation or postponement less than 4 weeks from the confirmed date of work will result in a cancellation fee being billed and payable as penalty. If the work is rescheduled, labor will be billed in addition on completion.**

*\*The customer is required to have a WinKQCL® Software account set up for the engineer with 'Analyst' permissions and 'Reader management' permission if they do not want the engineer to use their own service laptop.*

Lonza Walkersville, Inc., 8830 Biggs Ford Road, Walkersville, MD 21793

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