

# Ortho Clinical Diagnostics

811 - 812, ILD Square,  
Sohna Road, Gurgaon - 122 001

## To Whom It May Concern: **CALIBRATION CERTIFICATE**

This is to certify that the system maintenance & calibration was performed on date **24/08/2024** for the machine, VITROS-250 Chemistry Analyzer, Installed at DR B LAL Lab, Alwar, Rajasthan.

Bearing **Serial No:27001297**

The calibration process includes optics calibration and the performance verification tests as per the manufacturer's procedures.

Validity: Six months for Optics Calibration.

Ortho Clinical Diagnostics Ltd



Mahendra Singh  
(Service Engineer)

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## CALIBRATION REPORT

Name of Instrument : VITROS 250  
Serial Number : **27001297**  
Installed at : **DR B LAL Lab, Alwar, Rajasthan.**

Date of Report : **24/08/2024**

### SECTION / TEST

### RESULT

#### **SAMPLE METERING**

a. Leak Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
The Dispense Leak Rate must $< 0.210$ V dc	Pass
The read-to-read leak rate should be $< 0.030$ V dc	Pass

b. Hysteresis Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
The Maximum Hysteresis Value must be $< 5.0$ steps	Pass
Combined Hysteresis values of any 3 consecutive readings must be $< 9.0$ steps	Pass

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## **REFERENCE METERING**

a. Leak Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
The Aspirate Value < 0.175 V dc	Pass
The Ambient Pressure must in range of 2.25–2.75 V dc	Pass
Consecutive reading should not fall > 0.030 V dc	Pass

b. Hysteresis Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
Mean Value of Hysteresis should be $\leq 5.0$ V dc	Pass
Maximum Value of Hysteresis should be $\leq 10.0$ V dc	Pass

## **INCUBATOR**

a. Pad Reflectance Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
Grand Mean Value must be in range of 0.75 – 0.99	Pass
Range must be $\leq 0.03$	Pass

## **ELECTROMETER**

a. Basic Mode Verification Test: PASS / FAIL

Parameters	Test 1	Test 2	Test 3	Test 4
Input	Test	Test	Test	Test
Source	Zero 0	Zero 0	Ref 1	Ref 1
Polarity	Neg 0	Neg 0	Neg 0	Neg 0
Ohm -	Low 0	High 1	Low 0	High 1
Ohm +	Low 0	High 1	Low 0	High 1
Read Type	One 0	One 0	One 0	One 0
Specifications	0.0 mv $\pm$ 2.4mv	0.0 mv $\pm$ 2.4mv	-200 mv $\pm$ 8mv	-200 mv $\pm$ 8mv

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## **REFLECTOMETER**

a. IRIS Adjustment : PASS / FAIL

SPECIFICATIONS	OBSERVATION
Lamp Output range 3.5 to 9.0 across all Filters	Pass

b. Static Test : PASS / FAIL

SPECIFICATIONS	OBSERVATION
All “%CV*K” must be $\leq 18.0$	Pass
All “SD Dark” must be $\leq 1.3$	Pass

c. Interleaved Static Test: PASS / FAIL

SPECIFICATIONS	OBSERVATION
All “%CV*K” must be $\leq 18.0$	Pass
All “SD Dark” must be $\leq 1.3$	Pass