



Calibration Report

SUNSHINE LAB & DIAGNOSTICS
(A Unit of Amar Greengrass Healthcare and Diagnostics Pvt.Ltd)
RZ-A-1/7, PIPAL WALI GALI, MAHAVIR ENCLAVE,
NEW DELHI
110045

DATE-19/10/2021

Dear Sir/ Madam,

As desired by you please find herewith the Calibration report of EM 200.

1. **Sr. No. 2002400**
2. Range of the instrument : Optical density Linear form 0-3.5 A
3. Precision & Accuracy study on EM-200
4. Next calibration Due: **18th OCT 2022**

This instrument is manufactured in accordance with the European law in force, in particular to "Electricity Safety" EN 61010 1 and "Electromagnetic Compatibility "EN 61326 Standards.

Pressure	Ideal	Actual
	0.9 bar	0.85 bar
Lamp Voltage	12 V	12.06V
Temperature	37 ⁰ C	37 ⁰ C

Photometer Calibration Check	Ok
Cuvette Blank Check	Ok

Wavelength	Gain
340	538
405	563
505	517
546	510
578	542
600	400
660	435
700	426

The instrument does photometer check before each batch of tests is run. It will give an error message if the photometer test fails and it will not run any samples.




Thanking you and assuring of our prompt attention at all times.

Yours faithfully,

For **TRANSASIA BIO-MEDICALS LTD.**

Krishan
19/10/2021
Krishan Kumar
Sr. Service Engineer

TRANSASIA BIOMEDICALS LIMITED				
TRAINING CERTIFICATE				
Instrument Name EM200	CLINICAL BIOCHEMISTRY ANALYZER	Instrument ID	2002400	

7th May 2021

TRAINING CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

This is to Certify that Mr./MS ABHINAV KUMAR THAKUR Technical Staff Team of Sunshine Lab and Diagnostics, Mahaveer Enclave, Delhi, 110045 have successfully completed training on operation and maintenance, under supervision of our Application Specialist Amit Pal. Training held on:- Fully Automated Analyzer, Model: EM200



Amit Pal
Sr. Application Specialist

For Transasia Bio-Medicals Ltd.



Calibration Certificate

This is to certify that the Fully Automatic Biochemistry Analyser Erba **EM-200**
Sr. No.-2002400 Installed at :

SUNSHINE LAB & DIAGNOSTICS
(A UNIT OF AMAR GREENGRASS HEALTHCARE & DIAGNOSTICS PVT. LTD.)

ADD: RZ A-1/7, PIPAL WALI GALI, MAHAVIR ENCLAVE, NEW DELHI- 110045

Has been fully calibrated and Qc has been run and found to be in range.
The calibration data is enclosed.

For Transasia Biomedicals Ltd


19/10/2021
krishan kumar
Sr. Service Engineer
Delhi.

Calibration Data



Diffraction Grating Data:				
Sr. No.	Filter	Gain Range	Measured Value	Ok Yes/No
	340	350-900	626	OK
	405	350-900	506	OK
	505	350-900	505	OK
	546	350-900	457	OK
	578	350-900	476	OK
	600	350-900	445	OK
	660	350-900	515	OK
	700	350-900	442	OK
Reagent Tray Temperature:				
		Range	Measured Value	Ok Yes/No
		4 -12 ° C	8°C	OK
Reaction Cuvette Tray Temperature:				
		Range	Measured Value	Ok Yes/No
		36.9 -37.1 ° C	37.0	OK
Water Pressure:				
		Range	Measured Value	Ok Yes/No
		0.9 – 1.1 bar	1.0 bar	OK
Lamp Voltage:				
		Range	Measured Value	Ok Yes/No
		11.9 – 12.1 v	12.0 v	OK
Cuvette Blank:				
		Range	Measured Value	Ok Yes/No
		0.01 – 0.10	All in Range	OK

For Transasia Biomedicals Ltd

19/10/2021


KRISHAN KUMAR
 Sr. Service Engineer
 Delhi.

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA[®] Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	


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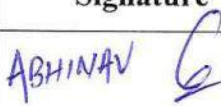
TRANSASIA BIOMEDICALS LIMITED				TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

1.0 PRE APPROVAL

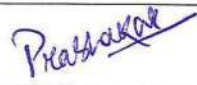
1.1 Prepared By

Name	Designation	Signature	Date
Amit Pal	Sr. Application Specialist		19-10-2021

1.2 Checked By

Name	Designation	Signature	Date
Mr. Abhinav Thakur	Lab Technologist		19-10-2021

1.3 Approved By

Name	Designation	Signature	Date
Dr. P A Kumar	HOD		19-10-2021

Note: After the Pre-Approval, this document is effective for the execution.

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

2.0 OBJECTIVE

The objective of this document is to provide an outline for the inspection of EM 200 (Bio-Chemistry Random Analyzer) and to verify that the following boundaries:

- Each Installed subcomponent complies with the engineering design and instrument data sheet / design specifications & manufacturer's recommendations.
- To ensure that all the safety features are defined before the start up of operational qualification exercise.
- The system meets the current regulatory requirements.
- To identify the Standard operating procedures for Operational Qualification.


3.0 SCOPE

The scope of this protocol is to outline procedure for Installation qualification of the subjected instrument within the following boundaries:

- Identification and verification of its Major components / Accessories
- Identification, Classification and Verification of Process Control Instruments / Gauges / Devices
- Identification and verification of Material of Construction
- Identification and verification of Supporting Utilities
- Identification of Standard Operating Procedures
- Identification and Verification of Documents

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS			
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID 2002400	

4.0 EXECUTION TEAM

Name	Department	Designation	Signature
Amit Pal	TSD	Sr. Application Specialist	

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

5.0 INSTRUMENT DESCRIPTION

The Clinical Chemistry Analyzer is an open, full automated, discrete, patient prioritized, random access, computerized analyzer.

Technical Specifications:

System Type	Open, Automated, Discrete, Random Access, Patient Prioritized, 1/2 Reagents
Analysis Speed	200 Biochemistry tests per hour 400 tests per hour (with ISE) for a cycle time of 18 seconds
Display resolution	1024 X 768
Analyzer Dimensions	810 (W) x 800 (D) x 600 (H) mm
Number of tests on board	Maximum: 50
Assay Modes	1-point, 2-point, Rate-A and Rate -B, ISE optional
Calibration	Linear (two point and multi point), Factorized and Non-linear multipoint
Sample (Tubes / Cups)	Primary tubes of 5, 7 or 10mL & sample cups
Photometric Optics	Mono and Bi-chromatic measurement using 8 wavelengths
Absorbance Range	0 - 2.5
Auxiliary Data	10,000 results
Interface	RS-232 C port for Bi-directional Communication
Stat Sampling	Total 30 positions

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Purpose:

The purpose of this instrument is to analyze the bio-chemical parameters, such as Sugar, Cholesterol, Tri-glycerides, Proteins, etc.

The working unit of the analyzer comprises the following:

- Basic operating unit with an intelligent photometer
- Sophisticated robotics combined with an operating console and a central processing unit (CPU).

Operating Unit:

The operating unit of the analyzer includes the sample and reagent handling systems. The sample handling system consists of a sample tray, sample arm, sample syringe and a wash station for the sample probe.

Photometric System:

The photometric system consists of 45 hard glass cuvettes, multi wavelength diffracting photometer and a halogen lamp.

Operating Console:

The operating console consists of a touch screen (optional) color TFT monitor, a key board and a mouse.

CPU (Central Processing Unit):

CPU consists of Pentium – IV 1.7 GHz processor (or Higher) with a 48 x CD Drive, and minimum 256 MB memory. The application software can be installed on computers with operating systems of Windows XP.

Besides the above mentioned, this analyzer has got the unique Software and Hardware features.

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Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID 2002400	


6.0 IDENTIFICATION OF MAJOR COMPONENTS / ACCESSORIES

Details of each major component identified in this section, is recorded in a data sheet under the section **08.0**.

Name of Component / Accessories	Present	Verified by Signature	Observations
	Yes / No		
Sample Tray / Disk	} yes	Anil	Ok
Sample Syringe			
Sample Probe			
Wash Station for Sample Probe			
Reagent Tray / Disk			
Reagent Bottles			
Reagent Probe			
Stirrer			
Permanent Reaction Cuvette			
9 Stage Laundry System			
Light Source			
Sample Cups			
Software of EM 200			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

7.0 INSTALLATION CHECK / REVIEW

S. No.	Statement	Yes / No	Verified by Signature
1.	Verify that the "as built" drawings are complete and represent the design concept	} Yes	
2.	Verify that major components / accessories are securely anchored and shock proof.		
3.	Verify that there is no observable physical damage.		
4.	Verify that there is sufficient room of servicing provided		
5.	Verify that all utilities and electrical connections have been done according to the drawings.		
6.	Walking access to ground mounted instrument provided.		
7.	Required electric connections are tight, weather proof and earthed.		
8.	Instrument identification nameplate visible.		
9.	Units installed on foundation and secure in place as per manufacturer's recommendations.		
10.	Verify that the instruments installed and leveled properly on the floor.		
11.	Verify that the Material of Construction is proper and meeting the requirements.		

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

8.0 INSPECTION CHECK / REVIEW

Instructions for completing the check / review

1. For each **data sheet**, record the required information with pen. Wherever required record "Yes" for acceptance, "No" for non-compliance and "NA" for not applicable.

"No" replies must be explained / justified.

2. When more than one component of same specification/type exists in the same equipment, individual data sheets should be filled for each component.
3. When a list of acceptable options is presented, tick (✓) the option that is actually present.
4. In the "**Method of Verification**" column indicate that item is installed and inspected according to manufacturer's specifications, such as by Visual / Physical, SOP, Test Certificate, Manual, etc.

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Sample Tray / Disk

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
No. of patient cups / samples	30 positions	} OK	Physical	Anil
Standards / Stat	30 positions			
Blank	Can be put on any position			
ISE positions (Optional)	Can be programmed on any positions			
Controls	Can be programmed on any positions			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Sample Syringe


Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Dispensing Volume	2 – 70 µL	} OK	Physical	Adil
Installed Location	Behind the instrument on the right side			
Quantity	01 No.			
Increase in dispensing volume	0.2 µL			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Sample Probe

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Aspiration Volume	2 – 70 µL	ok	physical	
MOC	Teflon coated			
Quantity	01 No.			
Increase in aspiration volume	0.2 µL			

TRANSASIA BIOMEDICALS LIMITED

INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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Instrument/ Component Name: Wash Station for Sample Probe

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
No. of position	01 No	ok	physical	Anil
Type of positions	i) Drain ii) Trough			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Reagent Tray / Disk

Date :19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Cool reagent disk	50 positions	} OK	Physical	Anil
Outer Rings	25 positions			
Inner Rings	25 positions			
Adaptors of 5mL	50 positions			
Maintenance of Temperature	8-12°C ± 2°C			
Rotation of disk	Counter-Clockwise			
Time for Rotation of one Cuvette	Every 18 seconds			

TRANSASIA BIOMEDICALS LIMITED

INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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Instrument/ Component Name: Reagent Bottles

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Minimum Capacity	20 mL	OK	Physical	<u>Arif</u>
Maximum Capacity	50 mL			
Quantity (Large)	25 Nos'			
Quantity (Smaller)	25 Nos'			
Type	Screw Capped			
Outer ring position	20 mL bottles & 5ml adaptors			
Inner ring position	20 mL & 50 mL bottles & 5ml adaptors			
MOC	Plastic			
Adaptor	50 Nos'			
Adaptor Capacity	5 mL			
Identification of Reagents	Barcode labels on the reagent containers			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Reagent Probe


Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Aspiration/Dispensing Volume	R1: 50 – 300 μ L R2: 0 or 10 – 300 μ L	} OK	Physical	Anil
MOC	Teflon coated			
Quantity	02 Nos.			
Increase in aspiration/dispensing volume	1 μ L			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Reagent Syringe


Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Maximum capacity	500 µL	} OK	Physical	} 
Installed Location	At the back of the instrument on the right side			
Quantity	01 No.			
Increase in dispensing volume	1 µL			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Stirrer

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Type	Single Stirrer	} ok	physical	
No. of paddles	01 No.			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Permanent Reaction Cuvette

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Quantity	45 Nos'	OK	physical	Anish
MOC	Hard Glass			
Capacity	770 µL			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: 7 Stage Laundry System

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Nozzles	Nozzle - 1	} OK		Anil
	Nozzle - 2			
	Nozzle - 3		Physical	
	Nozzle - 4			
	Nozzle - 5			
	Nozzle - 6			
	Nozzle - 7			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Light Source

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Watts	12 W	OK	Physical	Amih
Volts	12 V			
MOC	Halogen			
Quantity	01 No			

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Sample Cups

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Quantity	500 Nos'	OK	Physical	Anil
MOC	Plastic			
Capacity	2 mL			

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA [®] Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

Instrument/ Component Name: Software of EM 200

Date : 19-10-2021

Description	Specified	Actual	Method of Verification	Verified by Signature
Version	2019.07A	OK	Physical	Anib
CD number	N/A			
Product	EM- 200			
Make	Erba Transasia			

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

9.0 IDENTIFICATION AND VERIFICATION OF MATERIAL OF CONSTRUCTION

Identify and list down all components of the equipment for its material of construction.


Method of Test may be Molybdenum Test, Test Certificate, Manual, etc.

Component (s)	Material of Construction	Actual	Method of Verification	Verified by Sign & Date
Sample Probe	Teflon coated	} OK	Physical	Anish
Reagent Probe	Teflon coated			
Permanent Reaction Cuvette	Hard Glass			
Light Source	Halogen			
Reagent Bottle	Plastic			
Sample Cups	Plastic			

TRANSASIA BIOMEDICALS LIMITED			TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS			
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400

10.0 IDENTIFICATION AND VERIFICATION OF SUPPORTING UTILITIES

List the supporting utilities and record whether or not they are properly connected and identified.

Utilities	Observation / Result	Verified by Sign & Date
Power	} ok	 19/10/21
Distilled Water		
Wash Solution		
UPS		

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

11.0 IDENTIFICATION OF STANDARD OPERATING PROCEDURE

SOP No.	Title
Operation	Operation of Bio-Chemistry Random Analyzer
Calibration	Calibration of Parameters
Controls	Checking of Controls for Parameters
Maintenance	Maintenance / Checking of Distilled water, Waste, Wash solution, Cuvette rinse, Sample probe wash and Water save
Cleaning	Cleaning of Instrument surface

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS			
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400

12.0 IDENTIFICATION AND VERIFICATION OF DOCUMENTS

12.1 DRAWINGS

Title	Drawing No.	Verified by Sign & Date
As-built Drawing	N/A	<i>Amik</i> 19/10/14

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS			
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400

12.2 GENERAL DOCUMENTS


Title	Document No.	Verified by Sign & Date
General		
Purchase Order No.	N/A	<i>Amk</i> 19/10/24
Warranty Certificate	N/A	
Invoice	N/A	
Test Certificates		
Material of Construction	N/A	<i>Amk</i> 17/10/24
Electrical Motor	OK	

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA[®] Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

13.0 DEFICIENCIES / DEVIATIONS:

NO DEVIATION

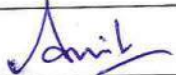
Reviewed by:

Name	Signature	Date
Amit Pal		19-10-2021

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INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS			
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400

14.0 SUMMARY AND EVALUATION:

Reviewed by:

Name	Signature	Date
Amit Pal		19-10-2021

TRANSASIA BIOMEDICALS LIMITED				TRANSASIA [®] Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

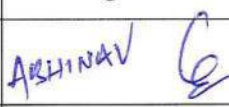
15.0 ABBREVIATIONS

SOP	Standard Operating Procedure
MOC	Material of Construction
IQ	Installation Qualification

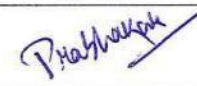
TRANSASIA BIOMEDICALS LIMITED				TRANSASIA® Bio-Medicals Ltd.
INSTALLATION QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

16.0 POST APPROVAL:

16.1 Checked by

Name	Designation	Signature	Date
Mr. Abhinav	Lab Technician	ABHINAV 	19-10-2021

16.2 Approved by

Name	Designation	Signature	Date
Dr. P A Kumar	HOD		19-10-2021

Note: This report is effective from the date of approval.

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB &
DIAGNOSTICS

Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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As part of Operational qualification, the following checks shall be done and each test shall be recorded:

Instrument Start-up

To check and establish the standard sequence to be followed, during start-up of the subjected instrument in Auto / Manual mode, to propose for correct operation and to avoid any damage to the instrument and personnel.

Functional Checks

To check and ensure that different functions (such as switching devices, indication / monitoring / recording devices, feedback system, etc.) for correct operation of the subjected instrument are working as expected.

Interlocks and Alarms Check

To check and ensure that the interlocks and alarms (such as status indication system, negative feed back system, control loops, sound alarms, etc.) for correct control and monitoring of the operation cycle are working as expected.

Safety / Security Checks

To check and ensure that the safety / security functions (such as program logging, process control, personnel safety systems, password check, etc.) to protect the instrument and personnel are working as expected.

Instrument Shut-down

To check and establish the standard sequence to be followed, during shut-down of the subjected instrument in Auto / Manual mode, to propose for correct operation and to avoid any damage to the instrument and personnel.

TRANSASIA BIOMEDICALS LIMITED


OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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1.0 INSTRUMENT START-UP:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Ensure that all the required electrical connections are properly connected.	} OK	 19/10/21	
Ensure the proper filling of double distilled / de-ionized water and Cleaning solution in the respective cans.			
Ensure the availability of XL Wash.			
Ensure the availability of Biohazard Waste.			
Ensure the availability of Normal Waste.			
Switch ON the rear switch of the analyzer.			
Switch ON the side switch of the analyzer.			
Switch ON the computer and start the analyzer application software.			
Initialization			

TRANSASIA BIOMEDICALS LIMITED

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS

TRANSASIA[®]
Bio-Medicals Ltd.

Instrument Name
EM200

Clinical Chemistry Analyzer

Instrument ID

2002400

2.0 FUNCTIONAL CHECKS:

2.1 Maintenance:

Refer the Operator's Manual for the procedures, for the following activities:

Activity	Observation	Verified by (Sign & Date)	Remarks
Photometer functioning	} ok	<i>Amish</i> 19/10/21	
Cuvette Rinse			

TRANSASIA BIOMEDICALS LIMITED

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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2.2 Loading of Reagents:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Reagent Level Scan, Dead Volume Check & 2 Reagent Chemistry	OK	<i>Anil</i> 19/10/24	

TRANSASIA BIOMEDICALS LIMITED

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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2.3 Calibration:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Blank (Distilled Water)	} ok	<i>Amik</i>	
Standard (Multical)			

TRANSASIA BIOMEDICALS LIMITED

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS

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Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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3.0 INTERLOCKS AND ALARMS CHECK:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Less volume of Distilled Water	} OK	Anil 19/10/21	
Less volume of Wash Solution			
More volume of Bio-Hazard waste			
More volume of Normal / General waste			

TRANSASIA BIOMEDICALS LIMITED



OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS

Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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4.0 SAFETY / SECURITY CHECKS:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Password Check for Test Parameters	OK	Anil 19/10/24	
Password Check for QC Mode			

OPERATIONAL QUALIFICATION CHECKLIST for SUNSHINE LAB & DIAGNOSTICS

Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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5.0 INSTRUMENT SHUT-DOWN:

Refer the Operator's Manual for the procedures, for the following activities:

Action	Observation	Verified by (Sign & Date)	Remarks
Sample Probe Wash	} OK	<i>Amik</i> 19/10/21	
Water Save			
Switch OFF the computer.			
Switch OFF the side switch of the analyzer.			
Switch OFF the rear switch of the analyzer.			

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PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS				
Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400	

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TRANSASIA BIOMEDICALS LIMITED

PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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1.0 PRE APPROVAL

1.1 Prepared By

Name	Designation	Signature	Date
Amit Pal	Sr. Application Specialist		16-11-2021

1.2 Checked By

Name	Designation	Signature	Date
Mr. Abhinav	Lab Technician		16-11-2021

1.3 Approved By

Name	Designation	Signature	Date
Dr. P A Kumar	HOD		16-11-2021

TRANSASIA BIOMEDICALS LIMITED

PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS



Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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2.0 OBJECTIVE

The objective of this protocol is to establish documented evidence for the Performance Qualification of EM 200 (Bio-Chemistry Random Analyzer) and to ensure that the results obtained are within the pre-determined Acceptance Criteria.

3.0 SCOPE

The Scope of this protocol is applicable to EM 200 (Bio-Chemistry Random Analyzer).

4.0 PRE-REQUISITES:

Following Pre-requisites are required before the execution of Performance Qualification.

- Completion of Installation Qualification prior to PQ.
- Completion of Operational Qualification prior to PQ.

5.0 EXECUTION TEAM

Name	Department	Designation	Signature
Amit Pal	TSD	Sr. Application Specialist	


TRANSASIA BIOMEDICALS LIMITED**PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS****TRANSASIA**[®]
Bio-Medicals Ltd.**Instrument Name**
EM200**Clinical Chemistry Analyzer****Instrument ID**

2002400

7.0 EXECUTION OF TEST PLAN

Run QC 5 times and Calculated Parameters CV%

Reviewed by:

Name	Signature	Date
Amit Pal		16-11-2021

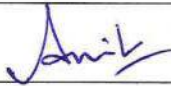
TRANSASIA BIOMEDICALS LIMITED**PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS****TRANSASIA**[®]
Bio-Medicals Ltd.

Instrument Name EM200	Clinical Chemistry Analyzer	Instrument ID	2002400
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8.0 DEFICIENCIES / DEVIATIONS:

No Deviations

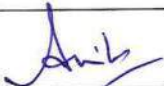
Reviewed by:

Name	Signature	Date
Amit Pal		16-11-2021

TRANSASIA BIOMEDICALS LIMITED**PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS****TRANSASIA**[®]
Bio-Medicals Ltd.**Instrument Name**
EM200**Clinical Chemistry Analyzer****Instrument ID****2002400****9.0 SUMMARY AND EVALUATION:**

All results are within acceptable range. (Data Attached).

Reviewed by:

Name	Signature	Date
Amit Pal		16-11-2021

Instrument Name
EM200

Clinical Chemistry Analyzer

Instrument ID

2002400

10.0 ABBREVIATIONS

SOP	Standard Operating Procedure
MOC	Material of Construction
PQ	Performance Qualification

TRANSASIA BIOMEDICALS LIMITED

PERFORMANCE QUALIFICATION for SUNSHINE LAB & DIAGNOSTICS



Instrument Name
EM200

Clinical Chemistry Analyzer

Instrument ID

2002400

11.0 POST APPROVAL

11.1 Checked by

Name	Designation	Signature	Date
Mr. Abhinav	Lab Technician	ABHINAV G	16-11-2021

11.2 Approved by

Name	Designation	Signature	Date
Dr . P A Kumar	HOD	Prashant Kumar	16-11-2021

Note: This report is effective from the date of approval.

Test CHOL Report Type Controls

Date From 16-Nov-2021

Date To 16-Nov-2021

Lot # S062125 Consumable ERBANORM

Sr#	Result	Unit	Fbg	Result Date	Curve #	Used Calibration
1	133	mg/dl	-	16-Nov-2021 16:19:38	2026	19-Oct-2021 17:39:50
2	134	mg/dl	-	16-Nov-2021 16:19:20	2025	19-Oct-2021 17:39:50
3	133	mg/dl	-	16-Nov-2021 16:19:01	2024	19-Oct-2021 17:39:50
4	135	mg/dl	-	16-Nov-2021 16:18:43	2023	19-Oct-2021 17:39:50
5	134	mg/dl	-	16-Nov-2021 16:18:25	2022	19-Oct-2021 17:39:50

Computed Ranges And Statistical Values

Reference Range 0
 Above Reference Range 0
 Below Reference Range 0
 Ref Range Not Defined 0
 Total Test(s) 7

SI#From - To =

N 5
 Mean 134
 SD 0.84
 %CV 0.63
 Range 2

Test Statistics

Test CRE

Report Type

Controls

Date From 16-Nov-2021

Date To 16-Nov-2021

Lot # S062125

Consumable

ERBANORM

Sr#	Result	Unit	Flag	Result Date	Curve #	Used Calibration
1	1.23	mg/dl	-1SD	16-Nov-2021 16:16:01	2014	16-Nov-2021 14:00:12
2	1.25	mg/dl	-1SD	16-Nov-2021 16:15:43	2013	16-Nov-2021 14:00:12
3	1.25	mg/dl	-1SD	16-Nov-2021 16:15:25	2012	16-Nov-2021 14:00:12
4	1.25	mg/dl	-1SD	16-Nov-2021 16:14:49	2010	16-Nov-2021 14:00:12
5	1.23	mg/dl	-1SD	16-Nov-2021 16:14:31	2009	16-Nov-2021 14:00:12

Computed Ranges And Statistical Values

Reference Range 0

Above Reference Range 0

Below Reference Range 0

Ref Range Not Defined 0

Total Test(s) 7

StatFrom - To -

N 5

Mean 1.24

SD 0.01

%CV 0.88

Range 0.02

Test Statistics

Test: GLU

Report Type

Controls

Date From: 16-Nov-2021

Date To: 16-Nov-2021

Lot #: S062125

Consumable

ERBANORM

Sr#	Result	Unit	Fbg	Result Date	Curve #	Used Calibration
1	89.5	mg/dl	-1SD	16-Nov-2021 16:17:49	2020	25-Oct-2021 16:23:21
2	88.8	mg/dl	-1SD	16-Nov-2021 16:17:31	2019	25-Oct-2021 16:23:21
3	89.1	mg/dl	-1SD	16-Nov-2021 16:17:13	2018	25-Oct-2021 16:23:21
4	89.6	mg/dl	-1SD	16-Nov-2021 16:16:55	2017	25-Oct-2021 16:23:21
5	87.5	mg/dl	-1SD	16-Nov-2021 16:16:37	2016	25-Oct-2021 16:23:21

Computed Ranges And Statistical Values

Reference Range: 0

Above Reference Range: 0

Below Reference Range: 0

Ref Range Not Defined: 0

Total Test(s): 7

Stat#From - To -

N: 5

Mean: 00.9

SD: 0.85

%CV: 0.95

Range: 2.1

Report Type

Controls

Test SGPTD
 Date From 16-Nov-2021
 Date To 16-Nov-2021

Lot # S062125

Consumable

ERBANORM

Sr#	Result	Unit	Flag	Result Date	Curve #	Used Calibration
1	37.2	U/L	-	16-Nov-2021 16:14:13	2008	23-Oct-2021 15:15:54
2	37.2	U/L	-	16-Nov-2021 16:13:54	2007	23-Oct-2021 15:15:54
3	36.7	U/L	-	16-Nov-2021 16:13:36	2006	23-Oct-2021 15:15:54
4	37.5	U/L	-	16-Nov-2021 16:13:18	2005	23-Oct-2021 15:15:54
5	37.5	U/L	-	16-Nov-2021 16:13:00	2004	23-Oct-2021 15:15:54

Computed Ranges And Statistical Values

Reference Range 0
 Above Reference Range 0
 Below Reference Range 0
 Ref Range Not Defined 0
 Total Test(s) 7

Sr#From - To -

N 5
 Mean 37.2
 SD 0.33
 %CV 0.88
 Range 0.8

Test UA

Report Type

Controls

Date From 16-Nov-2021

Date To 16-Nov-2021

Lot # S062125

Consumable ERBANORM

Sr#	Result	Unit	Flag	Result Date	Curve #	Used Calibration
1	6.1	mg/dl	-	16-Nov-2021 16:21:26	2032	20-Oct-2021 14:34:30
2	6.1	mg/dl	-	16-Nov-2021 16:21:08	2031	20-Oct-2021 14:34:30
3	6.1	mg/dl	-	16-Nov-2021 16:20:50	2030	20-Oct-2021 14:34:30
4	6.1	mg/dl	-	16-Nov-2021 16:20:32	2029	20-Oct-2021 14:34:30
5	6.1	mg/dl	-	16-Nov-2021 16:20:14	2028	20-Oct-2021 14:34:30

Computed Ranges And Statistical Values

Reference Range 0

Above Reference Range 0

Below Reference Range 0

Ref Range Not Defined 0

Total Test(s) 7

St#From - To -

N 5

Mean 6.1

SD 0.00

%CV 0.00

Range 0.0

Report Type Controls

Test HDLD
Date From 16-Nov-2021
Date To 16-Nov-2021

Lot # S062125 Consumable ERBANORM

Sr#	Result	Unit	Flag	Result Date	Curve #	Used Calibration
1	43.0	mg/dl	-	16-Nov-2021 16:23:14	2038	19-Oct-2021 17:50:21
2	43.4	mg/dl	-	16-Nov-2021 16:22:56	2037	19-Oct-2021 17:50:21
3	42.4	mg/dl	-	16-Nov-2021 16:22:38	2036	19-Oct-2021 17:50:21
4	42.7	mg/dl	-	16-Nov-2021 16:22:20	2035	19-Oct-2021 17:50:21
5	43.0	mg/dl	-	16-Nov-2021 16:22:02	2034	19-Oct-2021 17:50:21

Computed Ranges And Statistical Values

Reference Range 0
 Above Reference Range 0
 Below Reference Range 0
 Ref Range Not Defined 0
 Total Test(s) 7

SI#From - To -

N 5
 Mean 42.9
 SD 0.37
 %CV 0.87
 Range 1.0

Result Reprint

Report Type : Calibration 19-Oct-2021 To 05-Feb-2022

Sl #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
1	0	BLANK	SGPTD	-0.0004		3	19-Oct-2021 17:22:23
2	0	BLANK	SGPTD	-0.0005		4	19-Oct-2021 17:22:41
3	0	BLANK	SGPTD	-0.0004		5	19-Oct-2021 17:22:59
4	2005093B	MULTICAL	SGPTD	-0.0347		6	19-Oct-2021 17:23:17
5	2005093B	MULTICAL	SGPTD	-0.0343		7	19-Oct-2021 17:23:35
6	2005093B	MULTICAL	SGPTD	-0.0344		8	19-Oct-2021 17:23:53
7	0	BLANK	SGOTD	-0.0005		10	19-Oct-2021 17:24:29
8	0	BLANK	SGOTD	-0.0007		11	19-Oct-2021 17:24:47
9	0	BLANK	SGOTD	-0.0004		12	19-Oct-2021 17:25:05
10	2005093B	MULTICAL	SGOTD	-0.0362		13	19-Oct-2021 17:25:23
11	2005093B	MULTICAL	SGOTD	-0.0356		14	19-Oct-2021 17:25:41
12	2005093B	MULTICAL	SGOTD	-0.0355		15	19-Oct-2021 17:25:59
13	0	BLANK	ALPU	0.0004		17	19-Oct-2021 17:26:35
14	0	BLANK	ALPU	0.0003		18	19-Oct-2021 17:26:53
15	0	BLANK	ALPU	0.0004		19	19-Oct-2021 17:27:11
16	2005093B	MULTICAL	ALPU	0.0646		20	19-Oct-2021 17:27:29
17	2005093B	MULTICAL	ALPU	0.0636		21	19-Oct-2021 17:27:47

Shiril

Abhinav

Print Date 05-Feb-2022

Result Reprint

Report Type : Calibration

19-Oct-2021 To 06-Feb-2022

Sl#	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
120	20060938	MULTICAL	UA	0.0826		152	20-Oct-2021 14:35:24
121	0	BLANK	SGPTD	-0.0005		347	23-Oct-2021 15:15:15
122	0	BLANK	SGPTD	-0.0004		348	23-Oct-2021 15:15:36
123	0	BLANK	SGPTD	-0.0005		349	23-Oct-2021 15:15:54
124	20060938	MULTICAL	SGPTD	-0.0338		350	23-Oct-2021 15:16:12
125	20060938	MULTICAL	SGPTD	-0.0338		351	23-Oct-2021 15:16:30
126	20060938	MULTICAL	SGPTD	-0.0337		352	23-Oct-2021 15:16:48
127	0	BLANK	ALPU	0.00005		353	23-Oct-2021 15:17:06
128	0	BLANK	ALPU	0.00006		354	23-Oct-2021 15:17:24
129	0	BLANK	ALPU	0.00005		355	23-Oct-2021 15:17:42
130	20060938	MULTICAL	ALPU	0.0599		356	23-Oct-2021 15:18:00
131	20060938	MULTICAL	ALPU	0.0593		357	23-Oct-2021 15:18:18
132	20060938	MULTICAL	ALPU	0.0590		358	23-Oct-2021 15:18:36
133	0	BLANK	UREA	-0.0029		359	23-Oct-2021 15:18:54
134	0	BLANK	UREA	-0.0025		360	23-Oct-2021 15:19:12
135	0	BLANK	UREA	-0.0027		361	23-Oct-2021 15:19:30
136	20060938	MULTICAL	UREA	-0.1329		362	23-Oct-2021 15:19:48

Print Date 25-Feb-2022


Result Reprint

Report Type : Calibration

19-Oct-2021 To 05-Feb-2022

Sr #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
103	0	BLANK	UREA	-0.0028		133	20-Oct-2021 14:29:41
104	0	BLANK	UREA	-0.0030		134	20-Oct-2021 14:29:59
105	0	BLANK	UREA	-0.0027		135	20-Oct-2021 14:30:17
106	2005093B	MULTICAL	UREA	-0.1254		136	20-Oct-2021 14:30:35
107	2005093B	MULTICAL	UREA	-0.1283		137	20-Oct-2021 14:30:53
108	2005093B	MULTICAL	UREA	-0.1232		138	20-Oct-2021 14:31:11
109	0	BLANK	GLU	0.0536		140	20-Oct-2021 14:31:47
110	0	BLANK	GLU	0.0539		141	20-Oct-2021 14:32:05
111	0	BLANK	GLU	0.0538		142	20-Oct-2021 14:32:23
112	2005093B	MULTICAL	GLU	0.7440		143	20-Oct-2021 14:32:41
113	2005093B	MULTICAL	GLU	0.7167		144	20-Oct-2021 14:32:59
114	2005093B	MULTICAL	GLU	0.7101		145	20-Oct-2021 14:33:17
115	0	BLANK	UA	0.0042		147	20-Oct-2021 14:33:53
116	0	BLANK	UA	0.0039		148	20-Oct-2021 14:34:11
117	0	BLANK	UA	0.0037		149	20-Oct-2021 14:34:30
118	2005093B	MULTICAL	UA	0.0846		150	20-Oct-2021 14:34:48
119	2005093B	MULTICAL	UA	0.0825		151	20-Oct-2021 14:35:06

Print Date 05-Feb-2022


 Adwin

Result Reprint

Report Type : Calibration

19-Oct-2021 To 06-Feb-2022

Sr #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
35	20050938	MULTICAL	UREA	-0.1946 -	Adslim	42	19-Oct-2021 17:34:07
36	20050938	MULTICAL	UREA	-0.1940 -	Adslim	43	19-Oct-2021 17:34:25
37	0	BLANK	CRE	0.0014 -		45	19-Oct-2021 17:35:01
38	0	BLANK	CRE	0.0016 -		46	19-Oct-2021 17:35:19
39	0	BLANK	CRE	0.0014 -		47	19-Oct-2021 17:35:37
40	20050938	MULTICAL	CRE	0.0532 -		48	19-Oct-2021 17:35:55
41	20050938	MULTICAL	CRE	0.0535 -		49	19-Oct-2021 17:36:13
42	20050938	MULTICAL	CRE	0.0537 -		50	19-Oct-2021 17:36:31
43	0	BLANK	TRIG	0.0148 -		52	19-Oct-2021 17:37:07
44	0	BLANK	TRIG	0.0140 -		53	19-Oct-2021 17:37:25
45	0	BLANK	TRIG	0.0118 -		54	19-Oct-2021 17:37:43
46	20050938	MULTICAL	TRIG	0.2367 -		55	19-Oct-2021 17:38:01
47	20050938	MULTICAL	TRIG	0.2393 -		56	19-Oct-2021 17:38:19
48	20050938	MULTICAL	TRIG	0.2375 -		57	19-Oct-2021 17:38:37
49	0	BLANK	CHOL	0.0721 -		59	19-Oct-2021 17:39:13
50	0	BLANK	CHOL	0.0727 -		60	19-Oct-2021 17:39:32
51	0	BLANK	CHOL	0.0715 -		61	19-Oct-2021 17:39:50

Amil

Abhinav

Print Date

05-Feb-2022

Result Reprint

Report Type : Calibration

07-Oct-2021 To 19-Oct-2021

Sr#	Lot#	Concns/Std	Test	Result	Ung	Thy	Curve#	Result Date
69	0	BLANK	PRO	0.0874			82	19-Oct-2021 17:46:09
70	2005093B	MULTICAL	PRO	0.3880			83	19-Oct-2021 17:46:27
71	2005093B	MULTICAL	PRO	0.3791			84	19-Oct-2021 17:46:45
72	2005093B	MULTICAL	PRO	0.3800			85	19-Oct-2021 17:47:03
73	0	BLANK	GLHKN	0.0147			87	19-Oct-2021 17:47:39
74	0	BLANK	GLHKN	0.0148			88	19-Oct-2021 17:47:57
75	0	BLANK	GLHKN	0.0144			89	19-Oct-2021 17:48:18
76	2005093B	MULTICAL	GLHKN	0.0157			90	19-Oct-2021 17:48:33
77	2005093B	MULTICAL	GLHKN	0.0151			91	19-Oct-2021 17:48:51
78	2005093B	MULTICAL	GLHKN	0.0152			92	19-Oct-2021 17:49:09
79	0	BLANK	HOLD	0.0066			94	19-Oct-2021 17:49:45
80	0	BLANK	HOLD	0.0063			95	19-Oct-2021 17:50:03
81	0	BLANK	HOLD	0.0057			95	19-Oct-2021 17:50:21
82	1234	HDL LDL CAL	HOLD	0.0933			97	19-Oct-2021 17:50:39
83	1234	HDL LDL CAL	HOLD	0.0941			98	19-Oct-2021 17:50:57
84	1234	HDL LDL CAL	HOLD	0.0926			99	19-Oct-2021 17:51:16

Amil

Abhinav

Print Date 07-Feb-2022

Result Reprint

Report Type : Calibration

07-Oct-2021 To 19-Oct-2021

Sl #	Lot #	Consumable	Test	Result	Unit	Tag	Carve #	Result Date
1	0	BLANK	SGPTD	-0.0004			3	19-Oct-2021 17:22:23
2	0	BLANK	SGPTD	-0.0005			4	19-Oct-2021 17:22:41
3	0	BLANK	SGPTD	-0.0004			5	19-Oct-2021 17:22:59
4	2005093B	MULTICAL	SGPTD	-0.0347			6	19-Oct-2021 17:23:17
5	2005093B	MULTICAL	SGPTD	-0.0343			7	19-Oct-2021 17:23:35
6	2005093B	MULTICAL	SGPTD	-0.0341			8	19-Oct-2021 17:23:53
7	0	BLANK	SGOTD	-0.0035			10	19-Oct-2021 17:24:29
8	0	BLANK	SGOTD	-0.0037			11	19-Oct-2021 17:24:47
9	0	BLANK	SGOTD	-0.0034			12	19-Oct-2021 17:25:05
10	2005093B	MULTICAL	SGOTD	-0.0362			13	19-Oct-2021 17:25:23
11	2005093B	MULTICAL	SGOTD	-0.0356			14	19-Oct-2021 17:25:41
12	2005093B	MULTICAL	SGOTD	-0.0355			15	19-Oct-2021 17:25:59
13	0	BLANK	ALPU	0.0004			17	19-Oct-2021 17:26:35
14	0	BLANK	ALPU	0.0003			18	19-Oct-2021 17:26:53
15	0	BLANK	ALPU	0.0004			19	19-Oct-2021 17:27:11
16	2005093B	MULTICAL	ALPU	0.0348			20	19-Oct-2021 17:27:29
17	2005093B	MULTICAL	ALPU	0.0336			21	19-Oct-2021 17:27:47

Amis

Abhinav

Print Date 07-Feb-2022

Result Reprint

Report Type : Calibration 07-Oct-2021 To 19-Oct-2021

Sl #	Lot #	Consumable	Test	Result Unit	Flw	Curve #	Rec'd Date
52	2005093B	MULTICAL	CHOL	0.3273		62	19-Oct-2021 17:40:00
53	2005093B	MULTICAL	CHOL	0.3312		63	19-Oct-2021 17:40:26
54	2005093B	MULTICAL	CHOL	0.3111		64	19-Oct-2021 17:40:44
55	0	BLANK	UA	0.0029		66	19-Oct-2021 17:41:20
56	0	BLANK	UA	0.0020		67	19-Oct-2021 17:41:36
57	0	BLANK	UA	0.0033		65	19-Oct-2021 17:41:50
58	2005093B	MULTICAL	UA	0.0354		69	19-Oct-2021 17:42:14
59	2005093B	MULTICAL	UA	0.0349		70	19-Oct-2021 17:42:32
60	2005093B	MULTICAL	UA	0.0351		71	19-Oct-2021 17:42:50
61	0	BLANK	ALBD	0.0737		73	19-Oct-2021 17:43:26
62	0	BLANK	ALBD	0.0739		74	19-Oct-2021 17:43:44
63	0	BLANK	ALBD	0.0735		75	19-Oct-2021 17:44:02
64	2005093B	MULTICAL	ALBD	0.6721		76	19-Oct-2021 17:44:20
65	2005093B	MULTICAL	ALBD	0.6916		77	19-Oct-2021 17:44:38
66	2005093B	MULTICAL	ALBD	0.6932		78	19-Oct-2021 17:44:56
67	0	BLANK	PRO	0.0861		80	19-Oct-2021 17:45:33
68	0	BLANK	PRO	0.0866		81	19-Oct-2021 17:45:51

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Print Date 07-Feb-2022

Result Reprint

Report Type : Calibration

Sl #	Ltd #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
1	0	BLANK	PHOS	0.2544		7767	10-Feb-2022 14:53:14
2	0	BLANK	PHOS	0.2611		7768	10-Feb-2022 14:53:32
3	0	BLANK	PHOS	0.2675		7769	10-Feb-2022 14:53:50
4	2110192	MULTICAL	PHOS	0.5594		7770	10-Feb-2022 14:54:08
5	2110192	MULTICAL	PHOS	0.5619		7771	10-Feb-2022 14:54:26
6	2110192	MULTICAL	PHOS	0.5616		7772	10-Feb-2022 14:54:44
7	0	BLANK	CA	0.1972		7774	10-Feb-2022 14:55:20
8	0	BLANK	CA	0.1986		7775	10-Feb-2022 14:55:39
9	0	BLANK	CA	0.1963		7776	10-Feb-2022 14:55:57
10	2110192	MULTICAL	CA	0.5713		7777	10-Feb-2022 14:56:15
11	2110192	MULTICAL	CA	0.5706		7778	10-Feb-2022 14:56:33
12	2110192	MULTICAL	CA	0.5740		7779	10-Feb-2022 14:56:51

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Result Reprint

Report Type

Calibration

19-Oct-2021 To 10-Feb-2022

IS #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
290	2005093B	MULTICAL	CRE	0.0115		2057	17-Nov-2021 12:12:38
291	2005093B	MULTICAL	CRE	0.0114		2058	17-Nov-2021 12:12:56
292	0	BLANK	PRO	0.0555		2059	17-Nov-2021 12:13:14
293	0	BLANK	PRO	0.0561		2060	17-Nov-2021 12:13:32
294	0	BLANK	PRO	0.0570		2061	17-Nov-2021 12:13:50
295	2005093B	MULTICAL	PRO	0.2037		2062	17-Nov-2021 12:14:08
296	2005093B	MULTICAL	PRO	0.2027		2063	17-Nov-2021 12:14:26
297	2005093B	MULTICAL	PRO	0.2031		2064	17-Nov-2021 12:14:44
298	0	BLANK	UREA	-0.0261		2161	18-Nov-2021 11:30:47
299	0	BLANK	UREA	-0.0080		2162	18-Nov-2021 11:31:05
300	0	BLANK	UREA	-0.0056		2163	18-Nov-2021 11:31:23
301	2005093B	MULTICAL	UREA	-0.1453		2164	18-Nov-2021 11:31:41
302	2005093B	MULTICAL	UREA	-0.1472		2165	18-Nov-2021 11:31:59
303	2005093B	MULTICAL	UREA	-0.1481		2166	18-Nov-2021 11:32:17
304	0	BLANK	CRE	0.0019		2167	18-Nov-2021 11:32:35
305	0	BLANK	CRE	0.0018		2168	18-Nov-2021 11:32:53
306	0	BLANK	CRE	0.0017		2169	18-Nov-2021 11:33:11

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Print Date 10-Feb-2022

Result Reprint

Report Type: Calibration

Sl #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
18	2110192	MULTICAL	PHOS	0.5699		7800	10-Feb-2022 16:24:09
19	0	BLANK	BIDD	0.0004		7802	10-Feb-2022 16:24:46
20	0	BLANK	BIDD	0.0002		7803	10-Feb-2022 16:25:03
21	0	BLANK	BIDD	0.0003		7804	10-Feb-2022 16:25:21
22	2110192	MULTICAL	BIDD	0.0985		7805	10-Feb-2022 16:25:39
23	2110192	MULTICAL	BIDD	0.0987		7806	10-Feb-2022 16:25:57
24	2110192	MULTICAL	BIDD	0.0995		7807	10-Feb-2022 16:26:16
25	0	BLANK	BIT	0.0006		7809	10-Feb-2022 16:26:51
26	0	BLANK	BIT	0.0002		7810	10-Feb-2022 16:27:09
27	0	BLANK	BIT	0.0003		7811	10-Feb-2022 16:27:27
28	2110192	MULTICAL	BIT	0.1770		7812	10-Feb-2022 16:27:46
29	2110192	MULTICAL	BIT	0.1778		7813	10-Feb-2022 16:28:04
30	2110192	MULTICAL	BIT	0.1786		7814	10-Feb-2022 16:28:22
31	0	BLANK	UREA	0.0025		7816	10-Feb-2022 16:28:58
32	0	BLANK	UREA	0.0026		7817	10-Feb-2022 16:29:16
33	0	BLANK	UREA	0.0031		7818	10-Feb-2022 16:29:34
34	2110192	MULTICAL	UREA	0.1240		7819	10-Feb-2022 16:29:52

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Result Reprint

Report Type : Calibration

Sr #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
52	2110192	MULTICAL	TRIG	0.2356		7840	10-Feb-2022 16:36:11
53	2110192	MULTICAL	TRIG	0.2318		7841	10-Feb-2022 16:36:29
54	2110192	MULTICAL	TRIG	0.2333		7842	10-Feb-2022 16:36:47
55	0	BLANK	CHOL	0.0763		7844	10-Feb-2022 16:37:23
56	0	BLANK	CHOL	0.0766		7845	10-Feb-2022 16:37:41
57	0	BLANK	CHOL	0.0762		7846	10-Feb-2022 16:37:59
58	2110192	MULTICAL	CHOL	0.3332		7847	10-Feb-2022 16:38:17
59	2110192	MULTICAL	CHOL	0.3332		7848	10-Feb-2022 16:38:35
60	2110192	MULTICAL	CHOL	0.3318		7849	10-Feb-2022 16:38:53
61	0	BLANK	UA	0.0050		7851	10-Feb-2022 16:39:30
62	0	BLANK	UA	0.0055		7852	10-Feb-2022 16:39:48
63	0	BLANK	UA	0.0056		7853	10-Feb-2022 16:40:06
64	2110192	MULTICAL	UA	0.0812		7854	10-Feb-2022 16:40:24
65	2110192	MULTICAL	UA	0.0805		7855	10-Feb-2022 16:40:42
66	2110192	MULTICAL	UA	0.0797		7856	10-Feb-2022 16:41:00
67	0	BLANK	CA	0.2022		7858	10-Feb-2022 16:42:30
68	0	BLANK	CA	0.1950		7859	10-Feb-2022 16:42:48

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Result Reprint

Report Type : Calibration

Sr #	Lot #	Consumable	Test	Result Unit	Flag	Curve #	Result Date
35	2110192	MULTICAL	UREA	-0.1219		7820	10-Feb-2022 16:30:10
36	2110192	MULTICAL	UREA	-0.1235		7821	10-Feb-2022 16:30:26
37	0	BLANK	CRE	0.0018		7823	10-Feb-2022 16:31:04
38	0	BLANK	CRE	0.0017		7824	10-Feb-2022 16:31:22
39	0	BLANK	CRE	0.0017		7825	10-Feb-2022 16:31:40
40	2110192	MULTICAL	CRE	0.0020		7826	10-Feb-2022 16:31:55
41	2110192	MULTICAL	CRE	0.0030		7827	10-Feb-2022 16:32:16
42	2110192	MULTICAL	CRE	0.0029		7828	10-Feb-2022 16:32:34
43	0	BLANK	GLU	0.0632		7830	10-Feb-2022 16:33:10
44	0	BLANK	GLU	0.0627		7831	10-Feb-2022 16:33:28
45	0	BLANK	GLU	0.0625		7832	10-Feb-2022 16:33:47
46	2110192	MULTICAL	GLU	0.7292		7833	10-Feb-2022 16:34:05
47	2110192	MULTICAL	GLU	0.7304		7834	10-Feb-2022 16:34:23
48	2110192	MULTICAL	GLU	0.7286		7835	10-Feb-2022 16:34:41
49	0	BLANK	TRIG	0.0097		7837	10-Feb-2022 16:35:17
50	0	BLANK	TRIG	0.0105		7838	10-Feb-2022 16:35:35
51	0	BLANK	TRIG	0.0093		7839	10-Feb-2022 16:35:53

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