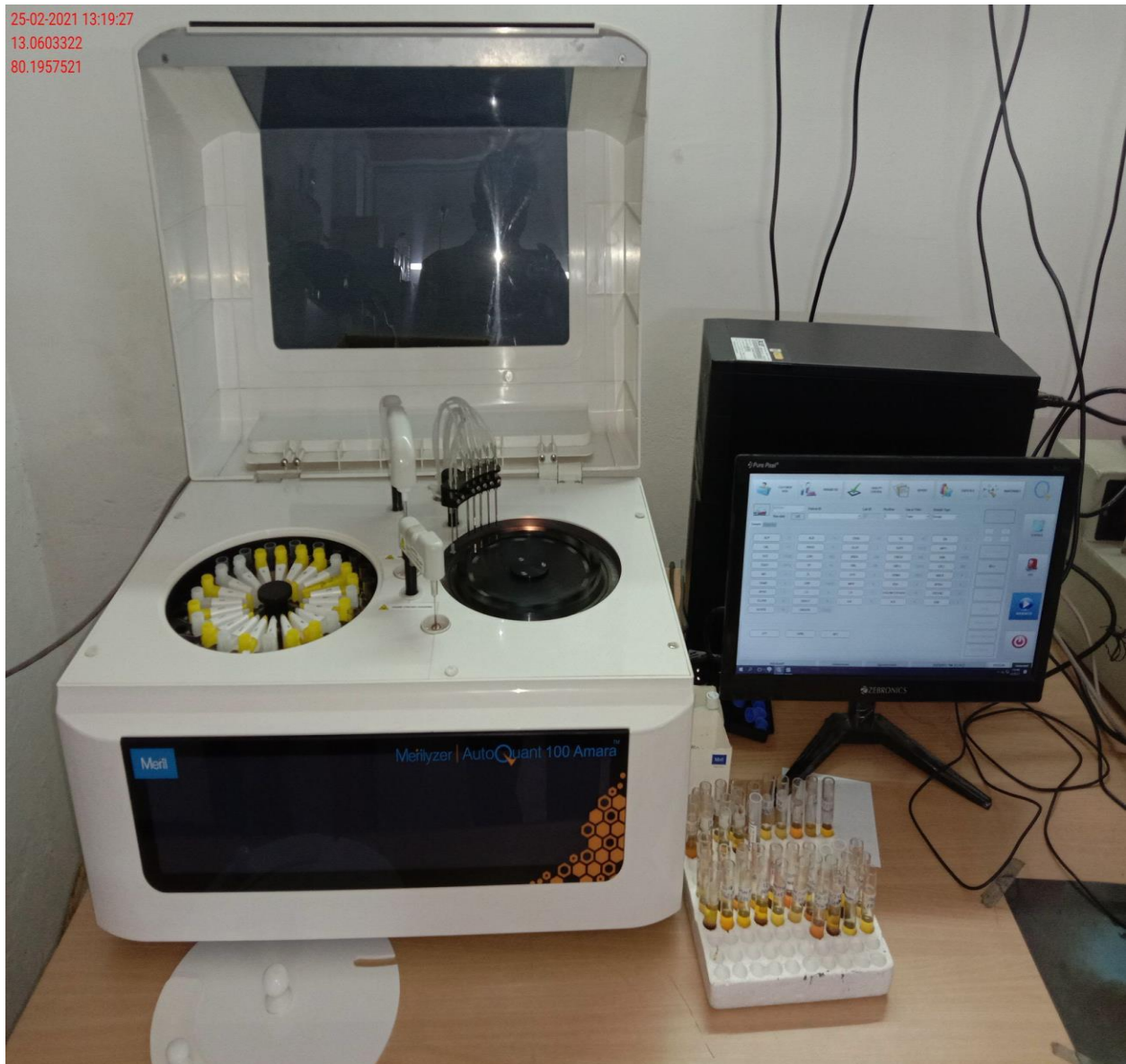


Meril AutoQuant 100



Calibration Certificate



Calibration Certificate

This is to Certify that Biochemistry Analyzer Meril **AutoQuant-100 Amara** Instrument Sr. No. **AQ020715** Installed at **The Bioclinical Lab, Chennai** has been calibrated by our engineer on **02-Jan-2021**, with appropriate and sophisticated tools. Below parameter has been calibrated:

TEST ITEMS AND RESULT

Appearance	No Imbalance Probe Movement
Leakage in Water tubing or CRU	No water leakage
Ambient temp (15- 32) Degree	24.0 degree C
Lamp Check	Ok
Sample Dispersing Volume	In range (0 to 30 ul)
Reagent cooling Temperature	8 ° C (0 to 15 Degree)
Optical Path length	0.65
Waster & Water Sensor	Working Properly
Threshold value	±34000 (≥25,000)
Valve & Motor	Working Properly
Reagent Dispensing Volume	In range (0 to 150 ul)
Power Supply and Earthing	230 Volts and Grounding less then 5 V
CV-Kinetic/End point/two Point	CV- 1.77% /2.42% /2.80%
SD-Kinetic/End point/two Point	SD- 1.15/0.39/0.69
Mean-Kinetic/End point/two Point	Mean- 97.55/14.34/24.79
Hardware Check-Functional Test	OK5415152524141112
Light Quality Check	OK
Cuvette Absorbance	OK
Cuvette Blank Value	OK >33000
Incubation temp.	37.0 ° C
Room temp.	25.0 degree C

This Calibration Certificate is Valid Up to **01-Jan-2022**.

Conclusion: All parameter are within range. The Machine is working properly. (As per Meril terms.)

Engineer Name: **Mr. Vishnu G- Service Specialist**



T +91 260 3052100
F +91 260 3052125
www.merillife.com

Meril Diagnostics Pvt. Ltd.
Survey No.135/2/B, Bilakhia House
Muktanand Marg, Chala
Vapi - 396191, Gujarat, India.

Cardiovascular

Orthopedic

Surgical

Diagnostics

Centrifuge



Calibration Certificate

S.S.I. 180735440 / 03-06-93

2

Mobile : 98402 01845

SRI SARAVANA ELECTRICAL SERVICE CENTRE

No. 4/9, Perumal Salai, New Perungalathur, Chennai - 600 063.

Specialist in : All kinds of Scientific Instruments and Laboratories Equipments,
Blood Bank Equipments, B.O.D, Incubator, Ovens, Plasma Freezer, Auto Clave, Furnace, Microscopes,
Laminar, Flow Unit, Colorimeter, Water Bath, Electrical balance and other Lab Equipments Sales & Services.

We are Undertaking Annual Maintenance Contract and Instruments Calibration.

Email : saravanascientific@yahoo.co.in

CALIBRATION CERTIFICATE

CUSTOMER NAME AND ADDRESS
THE BIOCLINICAL LABORATORY,
(R.T.O. BUILDING)
NO.4,SAI NAGAR MAIN ROAD,
VIRUGAMBAKKAM,
CHENNAI-600 092.

CALIBRATION CERTIFICATE NO : 3071/21
DATE OF CALIBRATION : 09-02-2021
NEXT CALIBRATION DATE : 09-02-2022

DESCRIPTION OF ITEM : LABORATORY CENTRIFUGE.ELECTRA
MODEL NO : R.8C- /8/13
SL.NO : HGLC-10541
ROTOR HEAD : 16X15 ML . SOH
LOCATION : LABORATORY
MAKE : REMI

DETAILS OF EQUIPMENT USED FOR CALIBRATION:

SR.	DESCRIPTION	CERTIFIEDBY	CERTIFICATE.NO.	VALIDITY
1.	DIGITAL TACHO METER. LUTRON MODEL. DT.2234.C. SL NO.L.207666	NORTH LAB CHENNAI. 4 NABL.	CERTIFICATE XEROX ENCLOSED	CERTIFICATE XEROX ENCLOSED

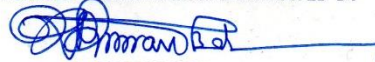
OBSERVATIONS:

SR.	INSTRUMENTSPEED DISPLAYED (RPM)	SPEED READING ON TACHOMETRE (RPM)	DIFF.IN.ACTUAL &TACHOMETRE (RPM)	REMARK
1.	1000	1060	60	Acceptable
2.	1750	1800	50	Acceptable
3.	2600	2650	50	Acceptable
4.	3000	3060	60	Acceptable
5.	4000	4050	50	Acceptable

Remark: 1. CALIBRATION TRACEABLE TO NATIONAL STANDARDS
2.OVERALL DEVIATION IS WITH IN SPECIFIED ACCURACY, HENCE THE INSTRUMENT IS OK.
3. RESULTS ARE RELATED ONLY TO THE ITEM CALIBRATED
4MAXIMUM TOLERANCE PERMISSIBLE IS ± 100 RPM
5 TRACEABILITY XEROX ENCLOSED



AUTHORIZED SIGNATURE & CALIBRATED BY


R. DURAI BABU
(Service Engineer)



Scientific Temper



Honesty, Humility



NORTHLAB (INDIA) PVT. LTD.

Laboratory : Plot No. 1, S.V Nagar, Perumalpattu, Thiruvallur - 602 024.
Ph.: +91 89399 23940 / 89399 40050 E-mail: sales@northlab.in



CERT No. CC-2457

Calibration Certificate

Cert. No.	: 2781020-M01	ULR. No.	: CC245720100002014F
Date of Issue	: 19-Oct-2020	Page	: 1 of 1
Customer	: SRI SARAVANA ELECTRICAL SERVICE CENTRE	Date Received	: 19-Oct-2020
Address	: No.4/9, Perumal Salai, New Perungalathur, Chennai - 600 063.	Date Calibrated	: 19-Oct-2020
		Due Date	: 18-Oct-2021
		Ambient Temp.	: 25±1°C
		Relative Humidity	: 60±10% r.h.
Instrument	: <u>DIGITAL TACHOMETER</u>	Serial No.	: L207608
Manufacturer	: LUTRON	Instrument ID.	: ---
Model No.	: DT-2234C	Range (Res)	: 0.1-99999 r.p.m(0.1/1r.p.m)
Part No.	: ---	Accuracy / MPE	: ± 0.05 % +1 digit
Location	: ---	Test Results	: As Found

METHOD OF CALIBRATION

The instrument was calibrated as per method no. MTM (Based on TR 45-02) at Northlab in accordance with ISO/IEC 17025:2017(E).

Standard Instrument Used	ID No. / Cert. No	Cal. Date	Cal.Due	Traceability
1. DIGITAL TACHOMETER	SALPR/1825/1/18-S1	03-Apr-2019	02-Apr-2021	NL SG

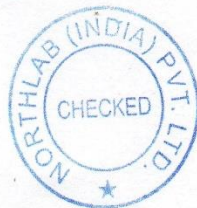
RESULTS OF MECHANICAL CALIBRATION

NON CONTACT					
NOMINAL VALUES (r.p.m)	INSTRUMENT READINGS (r.p.m)	CORRECTION (r.p.m)	TOLERANCE (r.p.m)	STATUS	MEASUREMENT UNCERTAINTY ± (r.p.m)
100.0	100.0	0.00	0.15	PASS	0.24
1000	1001	-1	1.50	PASS	2.27
5000	4999	1	3.50	PASS	4.30
10000	9999	1	6.00	PASS	7.08
20000	19999	1	11.00	PASS	12.94
50002	50001	1	26.00	PASS	30.12
89998	89997	1	46.00	PASS	53.17

REMARKS / DEVIATIONS IF ANY (SEE BACK OF THIS PAGE)

1. The instrument is within the Maximum Permissible Error..

K. Sankar
K.Sankar
Calibration Officer



M. Kumar
A.Murugappan / L.Muthuraman / M.Kumar
Authorised Signatory
NorthLab (I) Pvt. Ltd

End of Certificate

Digital Pipette



Digital Pipette Calibration Certificate

SRI SARAVANA ELECTRICAL SERVICE CENTRE

4/9, PERUMAL SALAI, NEW PERUNGALATHUR. CHENNAI-600 063 No.

Specialist in: All kind of Scientific Instruments and Medical Equipments, Service Works Hospital, College, Clinical Lab, Blood Bank Equipments, Cooling Centrifuges, B.O.D, Incubator, Auto Clave, Furnace, Microscopes, Laminar Flow, Deep freezers, Incubators, Hot air ovens. And others Calorimeter,
We Are Undertaking Annual Maintenance Contract and Instruments Calibration.

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OBSERVATIONS:

SR.	INSTRUMENT SPEED DISPLAYED (RPM)	SPEED READING ON TACHOMETRE (RPM)	DIFF. IN. ACTUAL & TACHOMETRE (RPM)	REMARK
1.	1000	1060	60	Acceptable
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4. MAXIMUM TOLERANCE PERMISSIBLE IS ± 100 RPM
5. TRACEABILITY XEROX COPY ENCLOSED

AUTHORIZED SIGNATURE & CALIBRATED BY

R. DURAI BABU
(Service Engineer)

Refrigerator

