



Calibration Certificate Rx – Daytona Plus

Instrument	Rx Daytona Plus Clinical Chemistry Analyzer
Serial No	7241-0226
Account Name	Vinamra Swaraj Lab
Installation Date	03 MAR 20
Calibration Date	18 FEB 24
Next Calibration Due	18 AUG 24

This is to certify that this analyser has been inspected and calibrated for following parameters:

Test Parameter	Target Value	Obtained Value
Input Voltage	230 -240 V AC	231 V AC
Cuvette Check	<0.5 Abs for all cuvettes	<0.21 Abs
Photometer Check	<0.5 Abs for all wavelengths	<0.16 Abs
Incubator Temperature	37° C ± 0.3 max	37.0 ° C
Reagent Tray Temperature	8- 15 ° C	8.00 ° C
Detector Performance Check	8.5 to 9.5 Volts	8.7 to 9.00 Volts
12V Lamp Supply	12 ± 0.3 volts	12Volts
5V Supply	5 ± 0.3 volts	5.0 volts
24V Supply	24 ± 0.3 volts	24 volts

The results obtained are as per specifications & tolerance ranges. The above calibration was done with a MECO 801AUTO Digital Multimeter. (Calibration certificate is enclosed herewith)

For Randox Laboratories India Pvt Ltd

Pranav Dudwadkar.
Customer Support Engineer



Vaidyanatheshwara Instruments



CERTIFICATE OF CALIBRATION

No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.
Ph : 080-23377266, Mob : 9986586789 / 9632221171 / 9964308118 | Email : info@viplgroup.com Web : www.viplgroup.com



NABL Accredited Calibration Lab as per ISO/IEC 17025 : 2017 With vide Certificate No: CC-2473

Name and Address of the Customer

M/s.: Radox Laboratories (India) Pvt. Ltd.,
Plot No.191-195&246-250, Bommasandra Jigani
Link Road Indl. Area, Rajapura Hobli, Jigani,
Anekal Taluka, Bangalore - 562 105.

Customer Reference

- 2.1 ULR No. : CC247323300003617F
- 2.2 Format No. : VI-FRM-TH-004
- 2.3 SRF.No : 1808
- 2.4 DC. No / Date : GBLM2324/400005 / 06-06-2023
- 2.5 Certificate No. : VI/23-24/1808-13
- 2.6 Date of Issue : 08-06-2023

Details Of Device Under Calibration(DUC).

- 3.1 Nomenclature : Digital Thermometer With Sensor
- 3.2 Make / Model : Lutron / TM-917
- 3.3 SI.No / ID.No : G.51771 / 000182
- 3.4 DUC Condition : Satisfactory
- 3.5 Calibration Ref. Std. : SOP-38-04
- 3.6 No.of Pages : 2
- 3.7 Calibration Date : 08-06-2023
- 3.8 Calibration Due : 07-06-2024
- 3.9 Calibration done at : VI Thermal Lab
- 3.10 Discipline : Thermal

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Environmental Condition

Temperature: 25.2°C - 25.4°C Humidity: 49 %RH -51 %RH

Standards Used for Temperature Calibration

Sl. No.	Nomenclature	Make / Model	Sl. No.	Certificate. No.	Cal Agency / Validity
	Platinum Resistance Thermometer	Fluke/5609 (Sensor) Isotech/Milli K (Indicator)	42202-11(Indicator) & 03520(Sensor)	FL/C/TH/18072022-C006	Farelabs, Gurugram / 26-07-2023

Dry Block Calibrators is used as source.

Note:

- 1. The Calibration Certificate relates only to the above DUC
- 2. Publication or reproduction of this Certificate in any form other than by complete set of the whole report & in the language, written, is not permitted without the written consent of VI Lab.
- 3. Corrections/erasing, invalidate the Calibration Certificate.
- 4. Calibration of the DUC are traceable to National standards/International Standards
- 5. Any error in this Certificate should be brought to our knowledge within 30 days from the date of this Cert.
- 6. Results Reported are valid at the time of and under the stated conditions of measurements.
- 7. The usage of NABL Symbol is as per NABL guidelines given in NABL-133

Z.R. 16/08/23

Calibrated By

Checked By





Vaidyanatheshwara Instruments



CERTIFICATE OF CALIBRATION

COMMITTED TO THE
BEST SERVICE SINCE - 1996

No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.

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ABL Accredited Calibration Lab as per ISO/IEC 17025 : 2017 With vide Certificate No: CC-2473

Certificate No. VI/23-24/1808-13

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Results:

Range : Ambient to 200 °C

Resolution:- 0.01 °C

S/N	Set Point	STD Reading (°C)	DUC Reading (°C)	Error Observed (°C)	Measurement Uncertainty ± (°C)	k Factor
	30	29.9875	29.89	-0.0975	0.091	2.0
	50	49.9564	49.78	-0.1764	0.091	2.0
	100	99.9231	99.61	-0.3131	0.091	2.0
	150	149.8879	149.32	-0.5679	0.182	2.0
	200	199.8564	199.13	-0.7264	0.182	2.0

Conclusion/Remarks:-

1 Measurement uncertainty reported is at 95.45 % confidence level with k=2.

Calibrated By

Purnima V
(Calibration Engineer)

Checked By

Umesh D
(Lab In-Charge)



REVIEWED



Vaidyanatheshwara Instruments



CERTIFICATE OF CALIBRATION



No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.
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Page 1 of 3

1 Name and Address of Customer

M/s: Radox Laboratories (India) Pvt.Ltd.,
Plot No.191-195 & 246-250,
Bommasandra Jigani Link Road Indl.Area.,
Rajapura Hobli, Jigani, Anekal Taluk, Bangalore - 562 105.

2 Customer Reference

2.1 ULR No. : CC247323200001658F
2.2 SRF No : 1808
2.3 Certificate No. : VI/23-24/1808-01
2.4 Format No. : VI-FRM-ET-008
2.5 Receipt Date : 07-06-2023
2.6 DC No. & Date : GBML2324/400005 & 06-06-2023
2.7 Date of Issue : 08-06-2023

3 Details Of Device Under Calibration(DUC).

3.1 Nomenclature : Digital Multimeter
3.2 Make / Model : Mastech / MAS830L
3.3 SI.No / ID.No : 404994 / 000181
3.4 DUC Condition : Satisfactory
3.5 Calibration Procedure No. : SOP-37-08
3.6 No.of Pages : 3
3.7 Calibration Date : 08-06-2023
3.8 Calibration Due : 07-06-2024
3.9 Calibration done at : VI Electrical Lab
3.10 Discipline : Electro-Technical

4 Environmental Condition

Temperature 25.2 °C Humidity 51 %RH

5 Standards Used for calibration

Sr. No.	Nomenclature	Make & Model	SI. No	Cal Agency	Certificate No.	Validity
1	Multiproduct Calibrator	Fluke & 5522A	2030905	ETDC Bangalore	CR/PCAL/52067	12-08-2023

6 Note:

- The Calibration Certificate relates only to the above DUC.
- Publication or reproduction of this Certificate in any form other than by complete set of the whole report & in the language, written, is not permitted without the written consent of VI Lab.
- Corrections/erasing, invalidate the Calibration Certificate.
- Calibration of the DUC are traceable to National standards/International Standards
- Any error in this Certificate should be brought to our knowledge within 30 days from the date of this Cert.
- Results Reported are valid at the time of and under the stated conditions of measurements.
- The usage of NABL Symbol is as per NABL guidelines given in NABL-133

Calibrated By

Vidya
Vidya

Checked By

Navya



REVIEWED

ZR-BA
14JUN23



Vaidyanatheshwara Instruments



CERTIFICATE OF CALIBRATION



No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.
 Ph : 080-23377266, Mob : 9986586789 / 9632221171 / 9964308118 | Email : info@viplgroup.com Web : www.viplgroup.com

ILAB Accredited Calibration Lab as per ISO/IEC 17025 : 2017 With vide Certificate No: CC-2473

Certificate No.

VI/23-24/1808-01

Page No: 2 of 3

Results:

Sl. No.	Parameter	Range	STD Input	DUC Reading	Error Claimed (±)	Error Observed	Measurement Uncertainty (±)	K Factor
1	DC Voltage	200mV	20 mV	19.9 mV	0.4 mV	-0.1 mV	0.0008 mV	2.0
2			100	99.8	0.8	-0.2	0.0039	2.0
3			180	179.7	1.2	-0.3	0.0027	2.0
4		2 V	0.2 V	0.199 V	0.004 V	-0.001 V	0.000003 V	2.0
5			1.0	0.998	0.008	-0.002	0.000015	2.0
6			1.8	1.797	0.012	-0.003	0.000029	2.0
7		20 V	2V	1.99 V	0.04 V	-0.01 V	0.000032 V	2.0
8			10	9.98	0.08	-0.02	0.000160	2.0
9			18	17.98	0.12	-0.02	0.000414	2.0
10		200 V	20 V	19.9 V	0.4 V	-0.1 V	0.00046 V	2.0
11			100	99.8	0.8	-0.2	0.00230	2.0
12			180	179.7	1.2	-0.3	0.00414	2.0
13		600 V	60 V	59 V	5 V	-1 V	0.00138 V	2.0
14			300	299	7	-1	0.00690	2.0
15			540	538	9	-2	0.01242	2.0
16	Resistance	200 Ω	20 Ω	19.9 Ω	0.7 Ω	-0.1 Ω	0.0008 Ω	2.0
17			100	99.7	1.3	-0.3	0.0040	2.0
18			180	179.5	1.9	-0.5	0.0065	2.0
19		2 kΩ	0.2 kΩ	0.199 kΩ	0.004 kΩ	-0.001 kΩ	0.00001 kΩ	2.0
20			1.0	0.997	0.010	-0.003	0.00004	2.0
21			1.8	1.795	0.016	-0.005	0.00006	2.0
22		20 kΩ	2 kΩ	1.99 kΩ	0.04 kΩ	-0.01 kΩ	0.00007 kΩ	2.0
23			10	9.98	0.10	-0.02	0.00035	2.0
24			18	17.96	0.16	-0.04	0.00061	2.0
25		200 kΩ	20 kΩ	19.9 kΩ	0.4 kΩ	-0.1 kΩ	0.00068 kΩ	2.0
26			100	99.6	1.0	-0.4	0.00340	2.0
27			180	179.3	1.6	-0.7	0.00738	2.0
28		2 MΩ	0.2 MΩ	0.199 MΩ	0.007 MΩ	-0.001 MΩ	0.00001 MΩ	2.0
29			1	0.998	0.015	-0.002	0.00004	2.0
30			1.8	1.796	0.023	-0.004	0.00025	2.0

Calibrated By

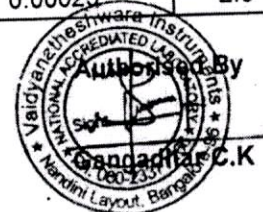
Vidya
Vidya

(Calibration Engineer)

Checked By

Navya
Navya

(Lab In-Charge)



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CERTIFICATE OF CALIBRATION



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Certificate No. VI/23-24/1808-01

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Results Continued....

Sl. No.	Parameter	Range	STD Input	DUC Reading	Error Claimed (±)	Error Observed	Measurement Uncertainty (±)	K Factor	
31	DC Current	2 mA	0.2 mA	0.201 mA	0.005 mA	0.001 mA	0.00003 mA	2.0	
32			1	1.003	0.013	0.003	0.00016	2.0	
33			1.8	1.805	0.021	0.005	0.00020	2.0	
34		20 mA	2 mA	2.01 mA	0.07 mA	0.01 mA	0.0002 mA	2.0	
35			10	10.03	0.15	0.03	0.0011	2.0	
36			18	18.05	0.23	0.05	0.0020	2.0	
37		200 mA	20 mA	20.1 mA	0.8 mA	0.1 mA	0.0022 mA	2.0	
38			100	100.3	2.0	0.3	0.0110	2.0	
39			180	180.6	3.2	0.6	0.0486	2.0	
40		10A	1 A	1.02 A	0.13 A	0.02 A	0.0003 A	2.0	
41			5	5.05	0.25	0.05	0.0055	2.0	
42			9	9.10	0.37	0.10	0.0099	2.0	
43		AC Voltage @ 50 Hz	200 V	20 V	20.2 V	1.2 V	0.2 V	0.0084 V	2.0
44				100	101.1	2.2	1.1	0.0220	2.0
45	180			181.4	3.2	1.4	0.0396	2.0	
46	600 V		60 V	61 V	11 V	1 V	0.0132 V	2.0	
47			300	303	14	3	0.0660	2.0	
48			540	546	16	6	0.1890	2.0	

Note:-
Diode & Continuity functions are checked & found satisfactory.

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Conclusion Remarks:-

1. Measured Readings are Reported.
2. Measurement Uncertainty reported is at 95.45 % confidence level.
3. Calibration done without any adjustments.

Calibrated By
Vidya
Vidya
(Calibration Engineer)

Checked By
Navya
Navya
(Lab In-Charge)





25 May 2020

Traceability Statement

To Whom It May Concern,

Catalogue Number: CAL2350

Each batch of serum is distributed to approximately 3000 laboratories worldwide and values are assigned by consensus of results obtained by these laboratories. The Calibration values for each instrument have been determined in at least 10 independent laboratories.

Values are verified against a master lot of calibrator which is traceable to reference methods or reference materials. In some cases, values may be assigned at Randox Laboratories in comparison to a master lot of calibrator which is traceable to reference methods or reference materials listed in the following table.

For and on behalf of Randox Laboratories Limited.

G. Ervine

Grace Ervine
Product Registration Officer





Analyte	Reference Material	Target Value	Total Uncertainty	% Uncertainty
Albumin (BCG)	IRMM ERM DA470 Reference Material	41.8 g/l	1.6 g/l	3.8%
Alkaline phosphatase (DEA)	Internal master	305U/L	38.5 U/L	12.6%
Alkaline phosphatase (AMP)	Internal master	210 U/L	24.1 U/L	11.5%
Alanine aminotransferase (ALT)	Internal master	41.5 U/L	3.56 U/L	8.6%
Pancreatic Amylase	IRMM ERM AD456 Reference Material	88U/L	3.47 U/L	3.9%
Amylase	IRMM ERM AD456 Reference Material	110U/L	7.66 U/L	7.0%
Aspartate aminotransferase (AST)	Internal master	42.6 U/L	3.17 U/L	7.4%
Bicarbonate	NIST SRM 351 Reference Material	15.6mmol/L	4.31 mmol/L	27.7%
Bile Acids	Internal Master	31.0 µmol/L	1.16 µmol/l	3.7%
Direct Bilirubin	Internal master	18.8 µmol/L	2.89 µmol/L	15.4%
Total Bilirubin	Internal master	34.5 µmol/L	4.78 µmol/L	13.8%
Calcium	NIST SRM 909 Reference Material Atomic Absorption Reference Method	2.48 mmol/L	0.15 mmol/L	6.1%
Cholesterol	NIST SRM 909 Reference Material	4.17 mmol/L	0.37 mmol/L	8.8%
Creatine Kinase	IRMM ERM AD455 Reference Material	225 U/L	25.1 U/L	11.1%
Creatinine	NIST SRM 967 level 2 Reference Material ID-GC/MS Reference Method	130 µmol/l	14.5 µmol/l	11.1%
Gamma-glutamyltransferase (GGT)	IRMM ERM AD452 Reference Material	61.1 U/L	6.4 U/L	10.5%
Glucose (GOD-PAP)	NIST SRM 917 and NIST SRM 965 Reference Materials	6.65 mmol/L	0.54 mmol/L	8.2%
Glucose (Hexokinase)	NIST SRM 917 and NIST SRM 965 Reference Materials	6.49 mmol/L	0.73 mmol/L	11.2%
Iron	NIST SRM 937 Reference Material	21.4 µmol/l	1.87 µmol/l	8.7%
Lactate	Gravimetric	1.63mmol/L	0.12 mmol/L	7.5%
Lactate Dehydrogenase LDH (Pyruvate – Lactate)	Internal master	443 U/L	32.1 U/L	7.2%
Lactate Dehydrogenase LDH (Lactate – Pyruvate)	IRMM ERM AD453 Reference Material	228 U/L	13.4 U/L	5.9%
Lipase	Internal master	44.5 U/L	3.27 U/L	7.4%
Magnesium	NIST SRM 909 Reference Material Atomic Absorption Reference method	0.962 mmol/L	0.08 mmol/L	8.1%
Inorganic Phosphorus	NIST SRM 186 Reference Material	1.54 mmol/L	0.07 mmol/L	4.5%
Total Protein	NIST SRM 927 Reference Material Photometric Reference Method	59 g/L	3.59 g/L	6.1%



Total Iron Binding Concentration (TIBC)	Internal master	269 µg/dL	9.06 µg/dL	3.4%
Triglycerides	NIST SRM 909 and SRM 1951 Reference Material ID-GC/MS Reference Method	1.24 mmol/L	0.08 mmol/L	6.1%
Urea	NIST SRM 909 Reference Material	7.72 mmol/L	0.66 mmol/L	8.6%
Uric acid	NIST SRM 909 Reference Material ID-GC/MS Reference Method	0.347 mmol/L	0.026 mmol/L	7.4%
Mean of All Instruments (Olympus assigned)				
Chloride (colormetric)	NIST SRM 909 Reference Material	103 mmol/L	3.27 mmol/L	3.2%
Potassium (Enzymatic)	NIST SRM 909 Reference Material	4.25 mmol/L	0.14 mmol/L	3.3%
Sodium (Enzymatic)	NIST SRM 909 Reference Material	145 mmol/L	5.11 mmol/L	3.5%
Hydroxybutyrate dehydrogenase (HBDH)	Internal master	259 U/L	10.78 U/L	4.2%
Total Acid Phosphatase	Internal master	15.6 U/L	0.67 U/L	4.3%
Prostatic Acid Phosphatase	Internal master	9.56 U/L	0.70 U/L	7.3%
Cholinesterase	Molar absorptivity Reference Method	5346 U/L	2.1 U/L	3.8%
Copper	Seronorm Trace Elements Reference Materials	17.9 mmol/L	0.37 mmol/L	2.1%
GLDH	Internal master	17 U/L	1.38 U/L	8.1%
LAP	Internal master	18.5 U/L	1.21 U/L	6.60%
Lithium	Atomic Absorption Reference Method	1.12 mmol/L	0.14 mmol/L	12.6%
Zinc	Internal master	26.8 mmol/L	1.56 mmol/L	6.0%

Date: 21st April 2021

To Whomsoever it may concern

Dear Sir,

The Rx Daytona+ analyser 7241-0226 installed at Vinamra Swaraj Hospital is placed on Reagent Rental contract with Randox Laboratories India Pvt Ltd.

Hence the machine will be covered under Free CMC.

The period of CMC will be from 3rd March 2020 till 2nd March 2025.

Jinesh Vadera

