



CALIBRATION REPORT

Details of the Unit Under Calibration:

Calibration Certificate No: SBS/CL/20-21/01061

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Customer Name:	SREE METRO DIAGNOSTIC CENTRE	Customer Address:	16/41, KRISHNA ROAD, NEW PERUNGALATHUR, CHENNAI-63
Location:	LAB-1	Serial No:	081011
Description:	BIO CHEMISTRY ANALYSER	Tag/Asset No:	SMDC/LAB-1/BCA/01
Make:	MICROLAB INSTRUMENTS	Date of Calibration:	30.09.2020
Model:	RX-50	Date of Due:	29.09.2021

Traceability Details:

S.No	Standard Used	Make	Model	Serial No	Validity
1	Electrical Safety Analyzer	Fluke	ESA615	2244202	26-Jun-2021

Environmental Conditions and Standard Operating Procedure Details:

Temperature	23°C	Calibration Done At	ONSITE
Humidity (40-70% RH)	54%	Calibration Procedure No	CP-BM001-2019/ES

REMARKS:

Performance Test Report : Attached

Electrical Safety Test Report : Attached

Electrical Safety Test Passed as Per IEC Standard 60601/62353

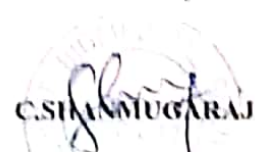
The above mentioned instruments has been calibrated using standard manufacturer recommended protocols, using equipments having traceability to National/International Standards. Partial reproduction of the certificates is not permitted.

Calibrated by:


M. BALAJI

(Calibration Engineer)

Authorized Signatory:


C. SRINIVASAN
(Technical Manager)

Result of Calibration: SBS/TR/20-21/01061

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Electrical Safety Test Passed : Yes / No

Electrical Safety Test		
Parameters Used	Measured in Test Gadget	Limits
Voltage N-E	2.7	< 3V
Voltage P-N	223	< 230V
Voltage P-E	227	< 230V
Maximum Current Taken by the DUT	0.1	As per Manufacture specification
Earth Leakage Current NC	124	<500 μ A for B,BF,CF
Earth Leakage Current SFC	232	<1000 μ A for B,BF,CF
Enclosure Leakage Current NC	5.2	<100 μ A for B,BF,CF
Enclosure Leakage Current SFC	5.5	<500 μ A for B,BF,CF
Patient Leakage Current NC	5.6	<100 μ A for B,BF, <10 μ A for CF
Patient Leakage Current SFC	5.8	<500 μ A for B,BF, <50 μ A for CF
Insulation Resistance M-P.E	Good	More than 100Mohm
Insulation Resistance M-A.P	Good	More than 100Mohm
Insulation Resistance A.P-P.E	Good	More than 100Mohm

Observation: The unit was found to delivery energy within allowed deviation limits.

CALIBRATION RESULT:

- Corrective maintenance required
- Removed from use
- Acceptable for use

Calibration Engineer Sign:



Date: 30.09.2020

CALIBRATION REPORT- SREE METRO DIAGNOSTIC CENTRE

1. Instrument: Bio-Chemistry Analyzer
2. Model: RX-50
3. S.no: 081011
4. Manufacturing Date: 01.08.13
5. Date of Calibration: 23.01.2021, Next Calibration date: 22.01.2022

TEST PARAMETERS

Test Parameters	Actual Parameters	Ok/Not Ok						
Lamp Voltage (11.8 to 12.2)	12 V	Ok						
SMPS Voltage(15.31V)	12.0 V	Ok						
Flow cell temperature	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="padding: 2px;">25'C</td> <td style="padding: 2px;">30'C</td> <td style="padding: 2px;">37'C</td> </tr> <tr> <td style="padding: 2px;">1650</td> <td style="padding: 2px;">1460</td> <td style="padding: 2px;">1125</td> </tr> </table>	25'C	30'C	37'C	1650	1460	1125	All ok
25'C	30'C	37'C						
1650	1460	1125						
Pump Calibration value(3500 to 5700)	5233	Ok						

S.no	Filters	AD	Gain Voltages	OFF SET
1	340nm	50627	14	32
2	405nm	49834	11	25
3	450nm	52551	20	46
4	505nm	50663	7	16
5	546nm	45199	3	7
6	578nm	51041	6	17
7	630nm	42315	2	5
8	000nm			

Normal Range: AD (35000-55000)

Offset (0, 4000)



Photometric Accuracy:

The readings of the absorbance are taken of following standard filters at the frequency of 546nm. The results are compared with its range.

Range of the Instrument : Optical Density linear from 0 to 3.0

Std Absorbance	Measured Absorbance	Range
0.35	0.36	0.300-0.400
0.72	0.70	0.65-0.75
1.5	1.480	1.20-1.8
2.0	2.2	2.0-2.50

Precision Control:

The absorbance of two standard filters of 0.4 and 2.0 is taken. The 20 replicates of each is made and mentioned as CV (%).

Std Absorbance	CV(%)
0.4	0.02%
2	0.006%

Clinical chemistry control:

CHEMISTRY	Level-1			Level-2		
	Measured	Mean	Range	Measured	Mean	Range
GLU	85	93.9	84.6-103	285	291	262-300
SGPT	33	31.6	24.4-38.8	102	96.9	82.6-111
CRTN	2.0	1.68	1.19-2.17	4.8	5.24	4.61-5.87



Yeda
23/01/2021