

Er. A. Ibathul Raziq DECE., BE (ICE) **Bio Medical Engineer**

Calibration Protocol & Report for Medical Equipment

Equipment : SEMI AUTO ANALYSER

MAKE

: ROBONIK

MODEL

: PRIETEST TOUCH

PROTECT CLASS / TYPE : Risk Class I

S. No.

: ATCD3850509RBK

| Location | : UPHC, WALAJAPET |
|----------|-------------------|
| | |

| S.No | - | easurement Parameters | Status | Remarks |
|---|--|--|--|------------------------------------|
| 2 | Electrical Test | (a)Safety Standards (range: 210-240 V) (b)Equipotential ground & Earthing (c)Risk of shock/fire Hazards, if any (d)Chassis & Insulation Resistance (e) Earth & Chassis Leakage Current (f) Battery conditions & charging status (a)Cabinet & Visible damages, if any | 230 volts 0 to 5 volts No Zero ohms 10mA NA | Stabilizer/UPS With in Ranges Well |
| | Condition Test | (b) Front Panet/Top lid, buckets, motor aseembly & power cord (c)Risk of mechanical damages, if any | No OK No | Checked OK |
| 3 | Performance Test | (a) On /Off switch (b) switch & functional tests (c) Running test (d) Abnormalities (e) Display checkup (f) Keypad/indicators & connector | Normal OK OK No Well Well | Ok Perfect Perfect |
| 4 | Calibration Test | (a) End Point Test (b) Display checkups (c) Filter selection (d) Record OD (e) Calculation (f) Two Point Test (g) Kinetic Test (h) Result | Done Ok OK OK Well Perfect | Perfect |
| Formulated By: Edition Research Laboratory | | Issued By: | User Departn | nent: |
| Researchead Review | ed By : ch team red On: 21.09.23 eview : 20.09.24 | O TO | | |



Er. A. Ibathul Raziq DECE., BE (ICE) Bio Medical Engineer

Calibration Protocol & Report for Medical Equipment

Equipment: PIPETTE

MAKE

: MICROLUX

MODEL

:100-1000µL

PROTECT CLASS / TYPE : Risk Class II

S. No.

: WA/PI/002

Location

| S.No | M | easurement Parameters | Status | Remarks |
|--------------------------|---------------------------------------|---|----------------------|------------|
| 1 | Electrical Test | (a)Safety Standards (range: 210-240 V) (b)Equipotential ground & Earthing (c)Risk of shock/fire Hazards, if any (d)Chassis & Insulation Resistance (e) Earth & Chassis Leakage Current (f) Battery conditions & charging status | | - |
| 2 | Physical Condition Test | (a)Cabinet & Visible damages, if any (b) Risk of mechanical damages, if any | No No | Checked OK |
| 3 | Performance Test | (e) Mean 99.6μl (f) A -0.5 μl (g) Acc % -0.71 (h) CV% -0.36 | OK OK OK | |
| | Calibration Test | min volume 100 μl max Volume 1000 μl (e) A+or - 1.5 , 5 μl (f) S 1.5 μl max Vol. 1000 μl (g) Acc+ or - 1.50, 0.50 (h) CV% 0.30,0.10 | Ok Ok Ok Ok | Tested |
| Resea | llated By: Edition rch Laboratory | Issued By: | User Departr | nent: |
| Resear nead Reviev | ved On: 21.09.23 leview : 20.09.24 | GOBI * | | 9 % |



Er. A. Ibathul Raziq DECE., BE (ICE) **Bio Medical Engineer**

Calibration Protocol & Report for Medical Equipment

Equipment: PIPETTE

MAKE MODEL : MICROLUX

: 5-50µL

PROTECT CLASS / TYPE : Risk Class II

S. No.

: WA/PI/001

Location

| S.No | M | easurement Parameters | Status | Remarks |
|------------------------------------|---|---|----------------------|------------|
| 1 | Electrical Test | (a)Safety Standards (range: 210-240 V) (b)Equipotential ground & Earthing (c)Risk of shock/fire Hazards, if any (d)Chassis & Insulation Resistance (e) Earth & Chassis Leakage Current (f) Battery conditions & charging status | | 2. 14. |
| 2 | Physical Condition Test | (a)Cabinet & Visible damages, if any (b) Risk of mechanical damages, if any | No No | Checked OK |
| 3 | Performance Test | (a) fMean 99.2μl (b) A -0.6 μl (c) Acc % -0.71 (d) CV% -0.36 | OK OK OK Ok | |
| 1 | Calibration Test | min volume 5 μl max Volume 50 μl (ELECTRONIC BALANCETEST) (a) A+or - 1.5,5 μl (b) S 1.5 μl max Volume 5 μl (c) Acc+ or - 1.50, 0.50 (d) CV% 0.60,0.20 | Ok Ok Ok Ok | Tested |
| Resear Endors Resear head | Issued By: Edition arch Laboratory rsed By: arch team wwed On: 21.09.23 | | ment: | |



Er. A. Ibathul Raziq DECE., BE (ICE) **Bio Medical Engineer**

Calibration Protocol & Report for Medical Equipment

Equipment: CENTRIFUGE

MAKE

: REMI

MODEL

: C-854/6

PROTECT CLASS / TYPE : Risk Class I

S. No.

: ZCLN36918

Location

| S.No | | leasurement Parameters | Status | Remarks |
|--|-------------------------------------|--|--|------------------------------------|
| 1 | Electrical Test | (a)Safety Standards (range: 210-240 V) (b)Equipotential ground & Earthing (c)Risk of shock/fire Hazards, if any (d)Chassis & Insulation Resistance (e) Earth & Chassis Leakage Current (f) Battery conditions & charging status | 230 volts 0 to 5 volts No Zero ohms 10mA NA | Stabilizer/UPS With in Ranges Well |
| 2 | Physical Condition Test | (a)Cabinet & Visible damages, if any (b) Front Panet/Top lid, buckets,motor aseembly & power cord (c)Risk of mechanical damages, if any | No OK No | Checked OK |
| 3 | Performance Test | (a) On /Off switch (b) Speed regulator switch & functional tests (c) Running test (d) Abnormalities (e) Display checkup (f) Keypad/indicators & connector | Normal OK Accurate OK No Well Well | Ok Perfect Perfect |
| 4 | Calibration Test | (a) Vibration test (b) Speed regulation gradual hike/wobbling test (c) Running test with load (d) Display checkup (e) Timer test | Done Ok | Perfect |
| Formulated By Edition Research Laboratory | | Issued By: | User Departr | nent: |
| Resear head Review | red On: 21.09.23 eview: 20.09.24 | S GOBI | | , (00) 4 |



Er. A. Ibathul Raziq DECE., BE (ICE) **Bio Medical Engineer**

Calibration Protocol & Report for Medical Equipment

Equipment: MICROSCOPE

MAKE

: ZOOM

MODEL

: CBCM-08

PROTECT CLASS / TYPE : Risk Class II/CF

5. No.

: 474356

Location

| S.No | M | easurement Parameters | Status | Remarks |
|--------------------------|---|---|---|--|
| 1 | Electrical Test | (a)Safety Standards (range: 210-240 V) (b)Equipotential ground & Earthing (c)Risk of shock/fire Hazards, if any (d)Chassis & Insulation Resistance (e) Earth & Chassis Leakage Current (f) Battery conditions & charging status | 235 volts 0 to 5volts No Zero ohms 10mA | Stabilizer/Ups With in Ranges Well |
| 2 | Physical Condition Test | (a)Cabinet & Visible damages, if any (b)Power Supply unit, halogen lamps, Power cord accessories (c) Risk of mechanical damages, if any | No OK No | Checked ok |
| 3 | Performance Test | (a) Halogen lamps intensity (b) Intensity test taken by lux meter for a particular lamp & results (c) Measurement of lux/Lens range (d) Lamp life time | Normal OK OK | Fine Brightness Perfect 20000 hrs Apprx. |
| | Calibration Test Ilated By: Edition rch Laboratory | (a) LED lamps intensity (b) Intensity test taken by lux meter for a particular lamp& results (c) Measurement of Lux/Lenses cal (d) Lamp life time Issued By: | OK Done -1200 Lux OK User Depart | In range Peak in range In range |
| Resear head Review | sed By: rch team wed On: 21.09.23 Review: 20.09.24 | GORL * | | 8) 25 |