



CALIBRATION CERTIFICATE

JOB ORDER NO	AIC/SRF/22-23/220533	PAGE NUMBER	01 of 02
CERTIFICATE NUMBER	AIC/22-23/220533-01	ULR NO:CC267422000002273F	Date of Issue:25-05-2022
CUSTOMER ADDRESS	M/S. GOVERNMENT HEAD QUARTERS HOSPITAL, PERIYAKULAM, THENI.		

DEVICE UNDER CALIBRATION DETAILS

NOMENCLATURE	MICRO PIPETTE
MAKE	THERMO SCIENTIFIC
MODEL NO	RW09471
SERIAL NUMBER	-
RANGE	10 to 100 µl
RESOLUTION	0.2 µl
LOCATION	LAB
ID NUMBER	-
DEVICE UNDER CALIBRATION RECEIVED DATE	24/May/22
CALIBRATION DATE	24/May/22
RECOMMENDED NEXT DUE DATE	23/May/23
CONDITION OF ITEM ON RECEIPT	GOOD

REFERENCE STANDARDS DETAILS

	MASTER 1	MASTER 2	MASTER 3
NOMENCLATURE	Electronic Balance		
MAKE	Radwag		
MODEL NO	AS60/220.R2		
SERIAL NUMBER	500722		
RANGE	0 to 220g		
TRACEABILITY DETAILS	TC/8471/2022		
VALIDITY	25-Feb-23		

MONITORED ENVIRONMENTAL CONDITIONS

TEMPERATURE (°C)	21.3	RELATIVE HUMIDITY (%RH)	46
CALIBRATION PROCEDURE	CP-M08-2016	STANDARD USED	ISO 8655 - 6

CALIBRATED BY  R.UVARAJ CALIBRATION ENGINEER	 SEAL OF ARROW	APPROVED BY  A.MASILAN TECHNICAL MANAGER
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ARROW INSTRUMENTS

CALIBRATION

6/875, Lakshmi Nagar, Near Government School,
Thoppampatti, Coimbatore - 641 017.
Mobile : 94433-55420, 82200-55434



E-mail : arrowinstrument@yahoo.co.in

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CALIBRATION RESULTS




DUC Readings	Standard Readings @27°C	Deviation	Systematic Error	Random Error	Expanded Uncertainty (±)
µl	µl	µl	%	%	µl
10	10.12	-0.12	-1.17	0.07	0.47
20	20.14	-0.14	-0.72	0.10	0.50
40	40.12	-0.12	-0.31	0.06	0.47
80	80.24	-0.24	-0.30	0.13	0.63
100	100.12	-0.12	-0.12	0.07	0.47

REMARKS

- 1.The above mentioned device under calibration was calibrated at Lab.
- 2.The user should determine the suitability of the instrument for its intended use.
- 3.The recalibration interval should be determined on the user requirement.
- 4.The results stated in this certificate relate only to the item calibrated.
- 5.This Calibration certificate shall not be reproduced except in full, without written approval of the laboratory.
- 6.Any correction / Modification in this calibration report kindly inform with in 30 days.
- 7.The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00 .
8. $V_{t2}=V_{t1}[1+g(t2-t1)]$ - This formula is used to compensated the thermal expansion factors at 27°C.
- 9.Calibration of the DUC are traceable to National Standards/International Standards.

MEASURED ENVIRONMENTAL CONDITIONS@LAB

Temperature (°C)	21.3	
Relative Humidity (% RH)	46	
Barometric Pressure (hPa)	966.5	
Water Temperature (°C)	20.3	
Density of water at 21.2 °c = ρw	1.139	µl/mg
Z Factor =	1.0028	µl/mg

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