

### Calibration Certificate

Certificate No.: YEA(C)/ 230724S/C875/007  
 ULR No.: CC222123000009958F

Dated : 31.07.2023

Calibrated for : **Central Pollution Control Board**  
 Southend Conclave 1582, Rajdanga Main Road,  
 Kolkata - 700107, West Bengal, India.

Calibrated on.	Next Calibration Due On.	Page No.	No. of Pages
24.07.2023	24.07.2024	1	3

**Description of Instrument**

*Name* : Water Bath  
*Identification* : CPCB/KOL/W.BATH-02/06  
*Working Range* : 70 to 100 °C  
*Least Count* : 1 °C  
*Make* : N/F

**Service Request No. / Order Reference** : 230724S/C875/001-009

**Receipt of Instrument** : 24.07.2023

**Location where calibration performed** : At site

**Applicable Specification of Instrument to be Calibrated** : Not Specified

**Condition of Instrument to be Calibrated** : Satisfactory

**Basis of Calibration** : Comparison method with reference to YEA/WI/T-04

**Environmental Condition during Calibration** : *Temp.* : 30±2°C *RH* : 60±10%

**Equipment used for Calibration** : Standard Data Acquisition System & Standard RTD Sensors (9 Nos.)

**Traceability** : To National Standard vide Certificate No.  
 YEA(C)/ 221221/Y001/001 valid till 20.12.2023  
 TL/023/52.1.1 valid till 11.01.2024  
 TL/023/52.1.2 valid till 11.01.2024  
 TL/023/52.1.3 valid till 11.01.2024  
 TL/023/52.1.4 valid till 11.01.2024  
 TL/023/52.1.5 valid till 11.01.2024  
 TL/023/52.1.6 valid till 11.01.2024  
 TL/023/52.1.7 valid till 11.01.2024  
 TL/023/52.1.8 valid till 11.01.2024  
 TL/023/52.1.9 valid till 11.01.2024

**Measurement Uncertainty** : The figures are stated in the result at coverage factor  $k= 2$  corresponding to confidence probability of 95% for normal distribution.

**Laboratory Identification** : Sticker is affixed for authentication of calibration.



The above Instrument/Equipment/Machine has been calibrated &  
 The results are given in the page 2 to ..... 3 ...of the Certificate.

Cont.....2



# YEA

☎ : 033 2677 1411/1412, 2667 1909

**YOUNG ENGG. & CALIBRATION SERVICES PVT. LTD.**

Admn. Office & Lab : Kamardanga Road (Opp. Tarama Ashram), Ichapur, Howrah - 711 104

E-mail : calibration@yeagroup.org ★ Visit us at : www.yeagroup.org

CIN : U74140WB2005PTC106389 ★ Toll Free Help Desk : 1800 345 9001

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### Calibration Results

#### Thermal Calibration

#### Calibration Results of Water Bath :

Set Value (°C)	Zone	DUC Value			Standard Value		
		( ° C )			( ° C )		
		Maximum	Minimum	Average	Maximum	Minimum	Average
70	1	70	69	70	69.921	68.886	69.471
	2				70.156	69.147	69.690
	3				69.669	69.171	69.440
	4				69.010	68.865	68.927
	5				69.743	69.062	69.375
	6				69.986	69.214	69.516
	7				69.812	69.380	69.617
	8				69.863	69.284	69.532
	9				70.014	68.832	69.622
Stability of Bath : 0.591 °C							
Nonuniformity of Bath : 0.694 °C							
Measurement Uncertainty ( ± ) : 2.65 °C							

Set Value (°C)	Zone	DUC Value			Standard Value		
		( ° C )			( ° C )		
		Maximum	Minimum	Average	Maximum	Minimum	Average
80	1	80	79	80	79.571	79.018	79.287
	2				79.546	79.011	79.287
	3				79.709	79.024	79.284
	4				79.576	78.978	79.347
	5				79.537	78.865	79.174
	6				79.553	78.946	79.278
	7				79.621	79.181	79.391
	8				79.508	79.192	79.399
	9				79.756	79.566	79.676
Stability of Bath : 0.342 °C							
Nonuniformity of Bath : 0.502 °C							
Measurement Uncertainty ( ± ) : 2.67 °C							

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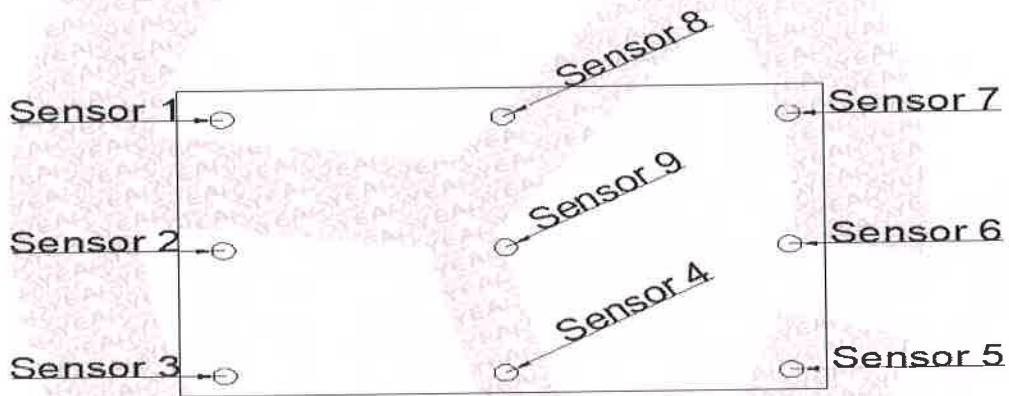
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Set Value (°C)	Zone	DUC Value			Standard Value		
		( °C )			( °C )		
		Maximum	Minimum	Average	Maximum	Minimum	Average
98	1	98	97	98	97.714	96.948	97.207
	2				97.392	96.711	97.096
	3				97.408	96.781	97.109
	4				97.481	96.743	97.098
	5				97.453	96.857	97.145
	6				97.525	96.853	97.165
	7				97.437	96.921	97.178
	8				97.404	96.911	97.152
	9				97.557	97.446	97.510
Stability of Bath : 0.383 °C							
Nonuniformity of Bath : 0.415 °C							
Measurement Uncertainty ( ± ) : 2.68 °C							



### Water Bath

Temperature Scale : ITS - 90

**DUC** : Device Under Calibration

**REMARKS** : The above Water Bath has been calibrated and the readings are tabulated above.

**NOTES** : This certificate refers to the results tabulated at the time of calibration only for the above mentioned item submitted for calibration and this should not be reproduced, other than in full except with prior written approval from the head of calibration laboratory.

Authorised By

A. Das

Manager Calibration

\*\*\* End of the Calibration Certificate \*\*\*

