

**Laboratory** Roots Metrology & Testing Laboratory (A Unit of Roots Industries India Limited) RKG Industrial Estate, Ganapathy, Coimbatore, Tamil Nadu

**Accreditation Standard** ISO/IEC 17025:2005

**Discipline** Thermal Calibration **Issue Date** 26.06.2014

**Certificate Number** C-0501 **Valid Until** 25.06.2016

**Last Amended on** 03.07.2014 **Page** 1 of 1

Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b>I. TEMPERATURE</b>			
<b>1</b> RTD, T/C Temperature Sensors with Indicators/ Controllers, Pyrometers with T/C Temperature sensors & Indicators for Ovens/ Furnaces <sup>#</sup>	-25°C to 140°C	0.60°C	Using Standard RTD, S-Type Thermocouple multifunction calibrator, Drywell bath/ Dry block furnace as per IEC 60584/ IEC 60751 by Comparison method
	>140°C to 400°C	2.60°C	
	>400°C to 1000°C	2.95°C	
	>1000°C to 1200°C	3.40°C	
	> 1200°C to 1500°C	4.75°C	
<b>2</b> Temperature Indicator of Furnace, Freezers, Ovens <sup>\$</sup> (Temperature at Single specified position)	-25°C to 140°C	1.50°C	Using T Type & S Type Thermocouple Temperature Sensors with Data logger by Comparison method
	>140°C to 1200°C	3.50°C	
<b>3</b> Temperature spatial mapping of Environmental Chambers, Freezers, Furnace, Ovens <sup>*</sup>	-70°C to -30°C	1.52°C	Using T Type & S Type Thermocouple Temperature Sensors with Data logger by Comparison method
	>-30°C to 100°C	1.64°C	
	>100°C to 300°C	3.50°C	

\* Measurement Capability is expressed as an uncertainty ( $\pm$ ) at a confidence probability of 95%

<sup>\$</sup>Only in Permanent Laboratory

<sup>\*</sup>Only for Site Calibration

<sup>#</sup> The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.