



10 Point Temperature Mapping Report

Customer : SHARP CONDITIONING SOLUTIONS
 Test Site : SHARP CONDITIONING SOLUTIONS
 Address : 65 HOBART STREET
 Suburb : RIVERSTONE NSW 2765
 Equipment Location : WORKSHOP
 Contact : PHILLIP
 Job No : 21447
 Asset ID : SPECIMEN FRIDGE

Report Number : **23399**

DUT Details :	Equipment Type	Manufacturer	Model	Serial Number	Date of Test	Date of Issue
	LAB FRIDGE	THERMOLINE	TLR-1500-3-GD	2307-75284	22/07/2024	22/07/2024

Test Reference Instrument Information

Load State : UNLOADED Source Instrument : RTD MEDICAL 2 Source Group : GROUP 1 Batch Details : 21447_23399 Number of Samples : 10 Number of Test Sites : 10	Start Time/Date : 22/07/2024 11:50:48 Stop Time/Date : 22/07/2024 12:51:08 Batch Duration : 1:00:20 Test Started By : Test Stopped By :	Make : MADGETECH Model : RTDTEMPX16 S/N : S26748 Calibration Temp at : 5.0 °C Max Correction : -0.3 °C Uncertainty : 0.15	Report : Z1319 Date : 17/01/2024
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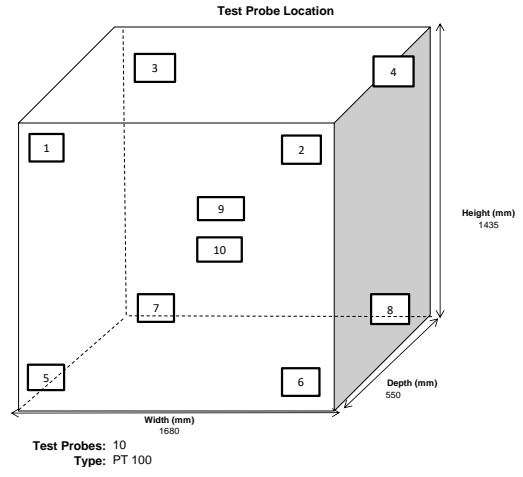
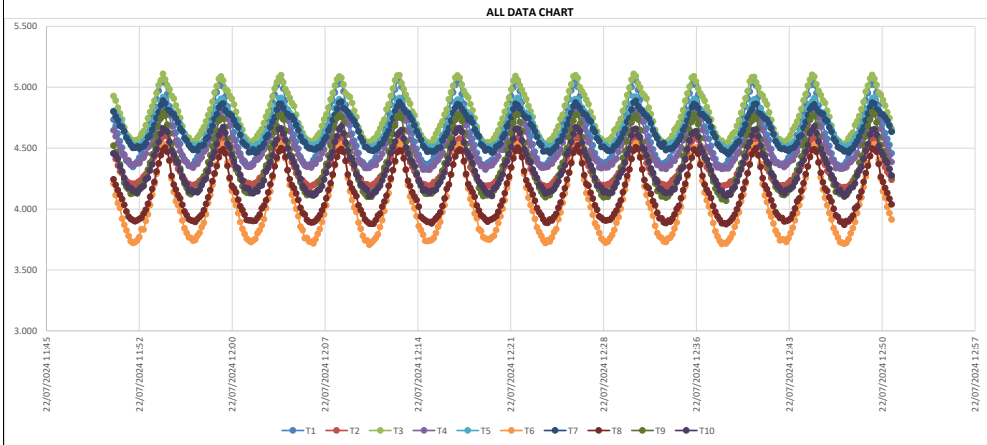
Sample Date/Time (D:H:M:S)	Sensor 1 °C	Sensor 2 °C	Sensor 3 °C	Sensor 4 °C	Sensor 5 °C	Sensor 6 °C	Sensor 7 °C	Sensor 8 °C	Sensor 9 °C	Sensor 10 °C	Mean by Sensors	SD by Sensors
22/07/2024 11:50:48	4.7	4.5	4.9	4.6	4.8	4.2	4.8	4.2	4.5	4.5	4.6	0.2
22/07/2024 11:55:38	4.6	4.4	4.9	4.6	4.7	4.1	4.7	4.2	4.4	4.4	4.5	0.3
22/07/2024 12:00:18	4.6	4.3	4.8	4.5	4.7	4.0	4.7	4.1	4.3	4.3	4.4	0.3
22/07/2024 12:05:28	4.4	4.2	4.6	4.4	4.6	3.8	4.6	4.0	4.2	4.2	4.3	0.3
22/07/2024 12:10:28	4.3	4.2	4.5	4.3	4.5	3.7	4.5	3.9	4.1	4.2	4.2	0.3
22/07/2024 12:20:28	4.5	4.2	4.6	4.4	4.5	3.8	4.5	3.9	4.2	4.2	4.3	0.3
22/07/2024 12:30:28	4.8	4.4	4.9	4.6	4.7	4.2	4.7	4.2	4.5	4.4	4.5	0.2
22/07/2024 12:40:48	4.9	4.6	5.0	4.8	4.8	4.5	4.8	4.4	4.7	4.6	4.7	0.2
22/07/2024 12:45:18	5.0	4.6	5.0	4.8	4.9	4.5	4.8	4.5	4.7	4.6	4.7	0.2
22/07/2024 12:51:08	4.5	4.2	4.7	4.4	4.6	3.9	4.6	4.0	4.3	4.3	4.4	0.3
Mean by Sample	4.6	4.3	4.8	4.5	4.7	4.1	4.6	4.1	4.4	4.3	Temp Gradient	0.6
SD by Sample	0.2	0.1	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.2	Overall Mean	4.5
											Overall SD	0.3

* Data in above table represents 10 equidistant samples taken from total batch data records.

Measurement Points	Min (°C)	Max (°C)	Gradient	Set Point Temperature (°C)	Display Temperature (°C)	Achieved Chamber Temp (°C)	Correction (°C)
1	4.3	5.1	0.8	4.1	4.0	4.4	0.4
2	4.2	4.6	0.4				
3	4.5	5.1	0.6				
4	4.3	4.8	0.5				
5	4.5	4.9	0.4				
6	3.7	4.5	0.8				
7	4.5	4.9	0.4				
8	3.9	4.5	0.6				
9	4.1	4.8	0.7				
10	4.1	4.7	0.6				

Maximum Recorded Temp (°C) :	5.1
Minimum Recorded Temp (°C) :	3.7
Temperature Fluctuation (°C) :	0.3
Overall Variation (°C) :	1.4
Temperature Variation in Space :	0.4
Test Expanded U ₉₅ Calculated :	0.9

Chamber Volume (m ³) :	1.33
Average Ambient Temp (°C) :	25.3
Variation Ambient Temp (°C) (+/-) :	1.1



Uncertainty of Measurement: The uncertainty of measurement is reported as an expanded uncertainty and has been calculated in accordance with the principles in "The ISO Guide to the Expression of Uncertainty in Measurement", and gives an interval estimate at the 95% confidence level using a coverage factor of K=2. The reported uncertainties apply only to the time of measurement and do not take into account any drift, hysteresis or other effect that may occur after this time.

Test Method : Used in the production of this report is in house procedure SWM-PRO-0075 and can be traced to the standard IEC 60068-3-5 and 11.

3.2 Temperature setpoint : The test chamber is mapped at the customer setpoint temperature.

4.4 Location of sensors : Where possible in each corner and in the center of the working space.

4.5.2 Achieving temperature stability : When the center of the working space has reached setpoint the minimum time is 30 minutes before starting the logging.

3.25 Traceability : The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Note 1: Measurement results for temperature are traceable to SI and reference ITS-90 for interpolations. Reference equipment has been calibrated by the National Measurement Institute or NATA accredited laboratories.

Note 2: The results in this report expressed in °C have been calculated using the International Temperature Scale of 1990 (ITS-90).

Note 3: The results contained in this report are relevant to the date of test. If the instrument is altered or damage in any aspect, the results may no longer be valid and the unit will require subsequent calibration.

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

K Hall

CDG

Authorised Signatory
 Kelly Hall - QA Administrator

Checked by
 Carlos Delgado - Quality Manager