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NATA ACCREDITED LABORATORY : Reg. No.411

NATA REPORT No: 4452a **TEST REPORT FOR TEMPERATURE CONTROLLED ENCLOSURE**

DATE TESTED: 14.07.14 **DATE OF ISSUE:** 17.07.14

CUSTOMER: LABEC
ADDRESS: 26-30 Farr Street, Marrickville NSW 2204

Mean Ambient Temp.: 22.0 °C **Location:** Workshop

EQUIPMENT: Oven **MAKER:** LABEC
SERIAL/PLANT No: R187 **MODEL:** OTWMHD24

CONTROLLER: Inbuilt **READABILITY ° C:** 1

Test CONDITION : Empty
Vent provided YES **Vent Position:** TOP **Open/Closed:** OPEN
Fan: YES **Fan on:** ON

Testing Time (min): 60 **Interval (min):** 1
Thermocouple used: T **T/Couple Roll No:** 5741
No:of Probes: 10 **Numbered from :** 1 to 10

TEST EQUIPMENT : Graphtech **MODEL:** GL220 **S/N:** H10114457

TEST METHOD: Australian Standard AS 2853/1986 & and number of probes as per Internal Procedure 201a.

Nominated Workspace Perimeter from inner Walls (in mm): 100

Selected Test Area & Sensor location if different to Procedure:

ALL TEMPERATURES IN DEGREES CELSIUS

Expected Temperature at this Setting: 40

CONTROLLER SETTING:

DIGITAL:	40
METER:	
DIAL:	

INDICATED TEMPERATURE:

DIGITAL:	40
METER:	
THERMOMETER:	

ENCLOSURE MEASURED TEMPERATURE:

Mid-range:	40.3
Maximum:	40.7
Minimum:	39.8

Temporal Variation:	0.3
Spatial Variation:	0.7
Overall Variation:	0.9

Uncertainty of Measurement at 95% confidence +/-: 0.9 °C

K-Factor: 2.02

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

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WORLD RECOGNISED
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Number: 411

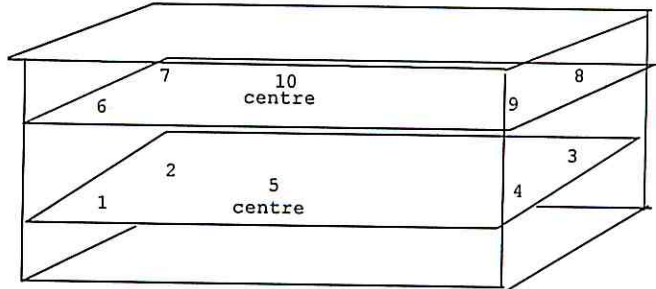
Continuation of Report: 4452a

Placement of Sensors in the Enclosure:

No:1 to 10 as per Internal Procedure 201 A.

Max.Temp.: Min.Temp.:

Probe 1:	40.2	40.0
Probe 2:	40.3	40.1
Probe 3:	40.5	40.2
Probe 4:	40.7	40.4
Probe 5:	40.3	40.1
Probe 6:	40.2	40.0
Probe 7:	40.2	40.1
Probe 8:	40.2	40.0
Probe 9:	40.2	40.0
Probe 10:	40.0	39.8



Internal Dimensions (Estimated) in cm:

L	65	W	70	H	75
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Notes:

- Laboratory measurements are traceable through National Standards referenced to The International Temperature Scale of 1990 (ITS-90).
- The calibration data applies only to the conditions existing at the time of test (ambient temperature, state of the instrument, etc) and those resulting from the use of the specified test method.
- Explanation to terms used on page 1.

Midrange : Maximum + Minimum/2.
 Maximum : maximum temperature measured at any one site.
 Minimum : minimum temperature measured at any one site.

Temporal variation : maximum - minimum at any one site with the maximum difference.
 Spatial variation : difference of maximum and minimum of the Midrange of all sensors.
 Overall variation : difference between maximum and minimum of all sensors.

Deviation from standard AS2853 : A set number of Sensors are used and placed as per Internal Procedure No:201 A

Comments:

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For and on behalf of
 C.I.SCIENTIFIC
 Approved signatory
 Jurgen Cyrulla

NATA Accredited Laboratory
 Number: 411

NATA REPORT No: 4452b **TEST REPORT FOR TEMPERATURE CONTROLLED ENCLOSURE**

DATE TESTED: 14.07.14 **DATE OF ISSUE:** 17.07.14

CUSTOMER: LABEC
ADDRESS: 26-30 Farr Street, Marrickville NSW 2204

Mean Ambient Temp.: 22.0 °C **Location:** Workshop

EQUIPMENT: Oven **MAKER:** LABEC
SERIAL/PLANT No: R187 **MODEL:** OTWMHD24

CONTROLLER: Inbuilt **READABILITY ° C:** 1

Test CONDITION : Empty
Vent provided YES **Vent Position:** TOP **Open/Closed:** OPEN
Fan: YES **Fan on:** ON

Testing Time (min): 60 **Interval (min):** 1
Thermocouple used: T **T/Couple Roll No:** 5741
No:of Probes: 10 **Numbered from :** 1 to 10

TEST EQUIPMENT : Graphtech **MODEL:** GL220 **S/N:** H10114457

TEST METHOD: Australian Standard AS 2853/1986 & and number of probes as per Internal Procedure 201a.

Nominated Workspace Perimeter from inner Walls (in mm): 100
Selected Test Area & Sensor location if different to Procedure:

ALL TEMPERATURES IN DEGREES CELSIUS

Expected Temperature at this Setting: 104

CONTROLLER SETTING:

DIGITAL:	104
METER:	
DIAL:	

INDICATED TEMPERATURE:

DIGITAL:	104
METER:	
THERMOMETER:	

ENCLOSURE MEASURED TEMPERATURE:

Mid-range:	104.5
Maximum:	105.5
Minimum:	103.4

Temporal Variation:	0.8
Spatial Variation:	1.6
Overall Variation:	2.1

Uncertainty of Measurement at 95% confidence +/-: 0.9 °C

K-Factor: 2.02

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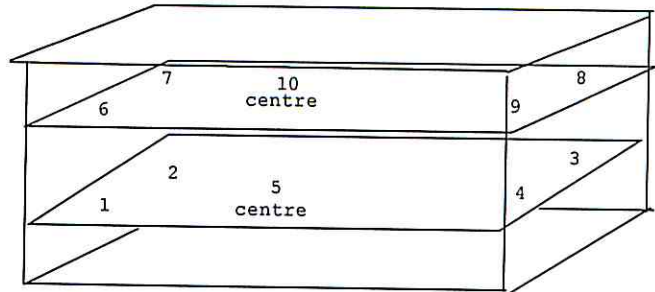
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 Number: 411

Continuation of Report: 4452a

Placement of Sensors in the Enclosure:

No:1 to 10 as per Internal Procedure 201 A.

	Max.Temp.:	Min.Temp.:
Probe 1:	104.4	104.0
Probe 2:	104.5	104.2
Probe 3:	104.5	104.2
Probe 4:	104.6	104.3
Probe 5:	104.5	104.3
Probe 6:	103.9	103.6
Probe 7:	105.5	104.7
Probe 8:	104.3	104.1
Probe 9:	104.0	103.7
Probe 10:	103.7	103.4



Internal Dimensions (Estimated)in cm:

L	W	H
65	70	75

Notes:

- Laboratory measurements are traceable through National Standards referenced to The International Temperature Scale of 1990 (ITS-90).
- The calibration data applies only to the conditions existing at the time of test (ambient temperature, state of the instrument, etc) and those resulting from the use of the specified test method.
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 Maximum : maximum temperature measured at any one site.
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Temporal variation maximum - minimum at any one site with the maximum difference.
 Spatial variation difference of maximum and minimum of the Midrange of all sensors.
 Overall variation difference between maximum and minimum of all sensors.

Deviation from standard AS2853 : A set number of Sensors are used and placed as per Internal Procedure No:201 A

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"WHERE MEASUREMENT IS PARAMOUNT TO SUCCESS"

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NATA REPORT No: 4452c **TEST REPORT FOR TEMPERATURE CONTROLLED ENCLOSURE**

DATE TESTED: 14.07.14 **DATE OF ISSUE:** 17.07.14

CUSTOMER: LABEC
ADDRESS: 26-30 Farr Street, Marrickville NSW 2204

Mean Ambient Temp.: 22.0 °C **Location:** Workshop

EQUIPMENT: Oven **MAKER:** LABEC
SERIAL/PLANT No: R187 **MODEL:** OTWMHD24

CONTROLLER: Inbuilt **READABILITY ° C:** 1

Test CONDITION : Empty

Vent provided YES Vent Position: TOP **Open/Closed:** OPEN

Fan: YES Fan on: ON

Testing Time (min): 60 **Interval (min):** 1

Thermocouple used: T **T/Couple Roll No:** 5741

No:of Probes: 10 **Numbered from :** 1 to 10

TEST EQUIPMENT : Graphtech **MODEL:** GL220 **S/N:** H10114457

TEST METHOD: Australian Standard AS 2853/1986 & and number of probes as per Internal Procedure 201a.

Nominated Workspace Perimeter from inner Walls (in mm): 100

Selected Test Area & Sensor location if different to Procedure:

ALL TEMPERATURES IN DEGREES CELSIUS

Expected Temperature at this Setting: 180

CONTROLLER SETTING:

DIGITAL:	180
METER:	
DIAL:	

INDICATED TEMPERATURE:

DIGITAL:	180
METER:	
THERMOMETER:	

ENCLOSURE MEASURED TEMPERATURE:

Mid-range:	180.0
Maximum:	181.6
Minimum:	178.4

Temporal Variation:	0.7
Spatial Variation:	2.6
Overall Variation:	3.2

Uncertainty of Measurement at 95% confidence +/-: 0.9 °C

K-Factor: 2.02

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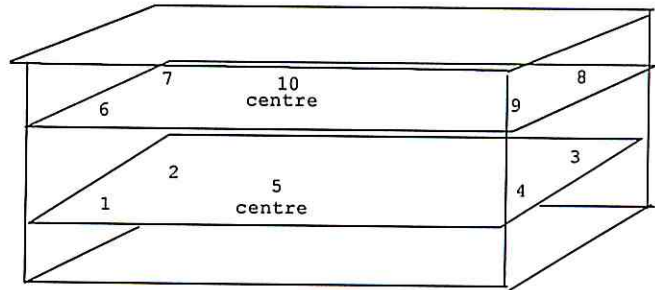
Continuation of Report: 4452a

Placement of Sensors in the Enclosure:

No:1 to 10 as per Internal Procedure 201 A.

Max.Temp.: Min.Temp.:

Probe 1:	179.5	179.1
Probe 2:	179.6	179.4
Probe 3:	180.0	179.7
Probe 4:	180.4	180.1
Probe 5:	180.0	179.7
Probe 6:	178.8	178.4
Probe 7:	181.6	180.9
Probe 8:	180.1	179.8
Probe 9:	179.6	179.3
Probe 10:	179.2	179.0



Internal Dimensions (Estimated)in cm:

L 65 W 70 H 75

Notes:

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