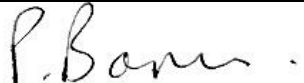


Laboratory Accreditation Programmes

Schedule to
CERTIFICATE OF ACCREDITATION

Laboratory	Spectrum Laboratories Limited	
Address	PO Box 204252, Highbrook, Auckland, 2161 Unit 1/25 Highbrook Drive, East Tamaki, Auckland, 2013	
Telephone	09 271-1616	
URL	www.spectrumlab.co.nz	
Authorised Representative	Mr John Mason Managing Director	
Client No.	1044	
Programme	Metrology & Calibration Laboratory	
Accreditation Number	1112	
Initial Accreditation Date	19 August 2014	
Conformance Standard	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories	
Testing Services Summary	5.35	Hygrometry
	5.63	Temperature controlled enclosures
Signatories	Mr Poyang Chen	5.35, 5.63
	Mr George Wang	5.35, 5.63

Authorised: General Manager		Issue 11	Date: 30/10/19	Page 1 of 2
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Schedule to

CERTIFICATE OF ACCREDITATION

Spectrum Laboratories Limited
 Metrology & Calibration Laboratory
SCOPE OF ACCREDITATION

Accreditation No 1112

Calibration and Measurement Capabilities (CMC) are expressed as an expanded uncertainty with a level of confidence of approximately 95 % ($k = 2$) ^{Note1}.

Measurement results are traceable to the International System of Units (SI) via an unbroken chain of comparisons to the New Zealand National Standards or to the National Standards of other Signatories to the CIPM MRA.

Calibration measurements are normally carried out at the laboratory's premises unless stated below for on-site calibrations conducted at the customers' premises.

5.35 Hygrometry

(b) Environmental chambers CMC

Verification of ovens, climate chambers and other enclosures for humidity. Verifications are normally carried out as per the relevant IEC Standard, or to a modified in-house procedure for customer specific requirements. Calibrations are normally carried out at the customer's premises.

Dew Point $-25\text{ }^{\circ}\text{C}$ to $70\text{ }^{\circ}\text{C}$ $0.15\text{ }^{\circ}\text{C}$

Relative Humidity 10 % to 95 %
 (ambient temperature $0\text{ }^{\circ}\text{C}$ to $70\text{ }^{\circ}\text{C}$) $1.4\text{ }%$

5.63 Temperature controlled enclosures

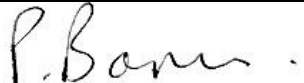
- (a) Ovens and furnaces
- (c) Incubators
- (d) Refrigerators and freezers
- (e) Conditioning rooms and cabinets
- (f) Other enclosures

Verifications are normally carried out as per the relevant IEC Standard, or to a modified in-house procedure for customer specific requirements. Calibrations are normally carried out at the customer's premises.

Temperature	CMC
$-38.5\text{ }^{\circ}\text{C}$ to $0\text{ }^{\circ}\text{C}$	$0.1\text{ }^{\circ}\text{C}$
$0\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$	$0.03\text{ }^{\circ}\text{C}$

Note 1:

Unless stated otherwise the CMC is based on the performance of the best commercially available device and measurement uncertainties achieved for specific calibrations may be greater than the CMC. A laboratory may not report measurement uncertainties lower than its CMC. However, if the device under calibration has a greater accuracy than the device used to calculate the CMC the laboratory may be able to use the calibration data to lower its CMC. Please contact the laboratory to discuss your specific requirements.

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