



National Association of Testing Authorities, Australia
SCOPE OF ACCREDITATION

EMC Technologies Pty Ltd

MELBOURNE LABORATORY
EMC TEST LABORATORY

| Accreditation Number: 5292 | Site Number: 21206 |

Date of Accreditation: 22/09/2008

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Availability: Services available to external clients

Note: Not all of the columns of the scope of accreditation displayed include data.

The only data displayed is that deemed relevant and necessary for the clear description of the activities and services covered by the scope of accreditation.

Grey text appearing in a SoA is additional freetext providing further refinement or information on the data in the preceding line entry.

ISO/IEC 17025 (2017)
Calibration

SERVICE	PRODUCT	DETERMINANT	TECHNIQUE	PROCEDURE	LIMITATION/RANGE
High frequency electrical metrology - Communications, electromagnetic field strength and EMC test equipment	E&H field probes and meters; Electromagnetic field hazard meters and warning indicators;	Frequency	Comparison with a reference standard		

CAPABILITY

with Calibration and Measurement Capability of-

Calibration of E & H-field probes in the range
0.01 MHz to 433 MHz at 120 V/m and 2.4 A/m
433 MHz to 1 GHz at 61.4 V/m and 0.55 A/m
1 GHz to 3 GHz at 61.4 V/m
3 GHz to 8 GHz at 61.4 V/m
8 GHz to 18 GHz at 61.4 V/m

± 1.2 dB from 0.01 MHz to 3 GHz
± 1.5 dB from 3 GHz to 8 GHz
± 1.8 dB from 8 GHz to 18 GHz

	Electrical fast transients (EFT) and surge generators	Pulse characteristics	Direct measurement by electrical input		
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CAPABILITY

Surge Generators
with Calibration and Measurement Capability of -
in the range \diamond 0.1 kV to 7 kV
 \diamond 5.60% for open circuit voltage
 \diamond 10.53% for open circuit front time
 \diamond 4.4% for open circuit duration
 \diamond 4.4% for short circuit current
 \diamond 4.29% for short circuit front time
 \diamond 4.3% for short circuit duration

		Pulse characteristics	Direct measurement by electrical input		
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CAPABILITY

Electrical fast transients (EFT)
with Calibration and Measurement Capability of -
in the range \diamond 0.5 kV to 20 kV
 \diamond 5.80% for peak voltage
 \diamond 4.2% for pulse width
 \diamond 1.2% for rise time
 \diamond 3.07% for repetition rate

	Harmonic emission compliance test systems	Harmonic currents	Comparison with a reference standard by differential measurement		
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CAPABILITY

with Calibration and Measurement Capability of -
0.15% of the fundamental of current for Harmonic currents
- from 0.7 A to 16 A total rms per phase
- from 1st to 40th harmonic with fundamental frequency between 50 to 60 Hz and voltage between 120 to 230 V

	Coupling/decoupling networks (CDN)	Insertion loss	Direct measurement by electrical input		
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CAPABILITY

with Calibration and Measurement Capability of -
in the frequency range 150 kHz to 230 MHz
 \pm 10.9% for impedance

	Electrostatic discharge (ESD) generators	Pulse characteristics	Direct measurement by electrical input		
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CAPABILITY

with Calibration and Measurement Capability of -
in the range \pm 2 kV to \pm 30 kV
 \pm 14.2% for rise time
 \diamond 8.10% for peak current
 \diamond 1.2% for peak voltage



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Artificial mains networks (AMN);
Line impedance stabilisation networks (LISN);

Voltage division factor

Direct measurement by electrical input

CAPABILITY

with Calibration and Measurement Capability of -
in the frequency range 9 kHz to 108 MHz
± 0.6 dB for voltage division factor
± 2.1% for voltage drop
◆ 10.9% for impedance
◆ 3.8° for phase

Line impedance stabilisation networks (LISN)

Voltage division factor

Direct measurement by electrical input

CAPABILITY

Balanced Telecom ISN (TLISN)
with Calibration and Measurement Capability of -
in the frequency range 150 kHz to 30 MHz
◆ 4.3 Ω for common mode impedance
◆ 2.4° for common mode phase
◆ 0.97 dB for voltage division factor
◆ 1.12 dB for isolation / DCMD
◆ 2.28 dB for Longitudinal conversion loss (LCL)

Voltage fluctuation and flicker compliance test systems

Internal reference impedance resistance; Short term flicker; Voltage deviation;

Comparison with a reference standard by substitution measurement

CAPABILITY

with Calibration and Measurement Capability of -
0.5% of Pst in the range from 0.5 Ps to 1.5 Ps for Short term flicker perceptibility
0.07% of fundamental of the voltage in the range from 0.5 to 2.0% for Voltage deviation, Dmax, with fundamental frequency between 50 Hz to 60 Hz and voltage between 1 V to 230 V
1.8 MΩ for Internal reference impedance resistance

Active rod antennas; Biconical antennas; Horn antennas; Log periodic antennas;

Antenna factor; Frequency;

Direct measurement by electrical input

SAE ARP 958, version D

CAPABILITY

Narrowband transducers and indicators
Radiofrequency antenna
with Calibration and Measurement Capability of-
Antenna Factor from -5 dB(1/m) up to 50 dB(1/m)
◆ 1.0 dB from 9kHz to 40 GHz
Active Rod antennas 9kHz to 30MHz
Biconical antennas 30MHz to 300MHz
Log periodic antennas 200MHz to 1000MHz
Large Horn antennas 200MHz to 2000MHz
Small Horn antennas 1GHz to 40 GHz

----- END OF SCOPE -----