


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 0452 Accredited to ISO/IEC 17025:2017	Eurofins Electrical & Electronic UK Limited	
	Issue No: 046 Issue date: 17 July 2025	
	Caddsdwn Industrial Estate Clovelly Road Bideford Devon EX39 3DX	Contact: Oliver Sanders Tel: +44 (0)1237 423388 Fax: +44 (0)1237 423434 E-Mail: enquiryetc@eurofins.com Website: www.etc.co.uk

Calibration performed by the Organisation at the locations specified

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details	Activity	Location code
Address Caddsdwn Industrial Estate Clovelly Road Bideford Devon EX39 3DX Local contact Oliver Sanders Tel: +44 (0)1237 423388 Fax: +44 (0)1237 423434 E-Mail: enquiryetc@eurofins.com	Electrical dc and lf Electrical rf Antennas	Bideford
Address Unit 5 Speedwell Road Castleford WF10 5PY Local contact Oliver Sanders Tel: +44 (0)1237 423388 Fax: +44 (0)1237 423434 E-Mail: enquiryetc@eurofins.com	Electrical rf (E-Field emitters only)	Castleford

Site activities performed away from the locations listed above:

Location details	Activity	Location code
Customers' sites or premises The customers' site or premises must be suitable for the nature of the particular calibrations undertaken and will be the subject of contract review arrangements between the laboratory and the customer.	Local contact Oliver Sanders Tel: +44 (0)1237 423388 Fax: +44 (0)1237 423434 E-Mail: enquiryetc@eurofins.com	Electrical dc and lf Electrical rf Site



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

CALIBRATION AND MEASUREMENT CAPABILITY

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
DC RESISTANCE				
Measurement	<p><i>At 10 A:</i> 100 $\mu\Omega$ to 1 mΩ 1 mΩ to 10 mΩ</p> <p><i>At 1 A:</i> 10 mΩ to 100 mΩ 100 mΩ to 1 Ω</p> <p><i>From 10 V to 1 kV:</i> 200 MΩ to 2 GΩ 2 GΩ to 20 GΩ 20 GΩ to 200 GΩ 200 GΩ to 2 TΩ</p> <p><i>From 1 kV to 5 kV:</i> 200 MΩ to 2 GΩ 2 GΩ to 20 GΩ 20 GΩ to 200 GΩ 200 GΩ to 2 TΩ</p>	<p>130 $\mu\Omega/\Omega$ 41 $\mu\Omega/\Omega$</p> <p>37 $\mu\Omega/\Omega$ 33 $\mu\Omega/\Omega$</p> <p>0.031 % 0.037 % 0.042 % 0.12 %</p> <p>0.15 % 0.15 % 0.16 % 0.19 %</p>	<div> <p>Other test currents may be used but with increased uncertainties.</p> </div> <p>Using voltage and current method.</p> <p>Using voltage and current method.</p>	Bideford
Measurement and generation	<p>0 Ω to 1 Ω 1 Ω to 20 Ω 20 Ω to 200 Ω 200 Ω to 2 kΩ 2 kΩ to 20 kΩ 20 kΩ to 200 kΩ 200 kΩ to 2 MΩ 2 MΩ to 20 MΩ 20 MΩ to 200 MΩ</p>	<p>15 $\mu\Omega$ 15 $\mu\Omega/\Omega$ 10 $\mu\Omega/\Omega$ 10 $\mu\Omega/\Omega$ 10 $\mu\Omega/\Omega$ 15 $\mu\Omega/\Omega$ 19 $\mu\Omega/\Omega$ 21 $\mu\Omega/\Omega$ 190 $\mu\Omega/\Omega$</p>		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
DC RESISTANCE (continued)				
Generation	100 $\mu\Omega$ to 2 m Ω 2 m Ω to 20 m Ω 20 m Ω to 200 m Ω 200 m Ω to 1 Ω 10 Ω 100 Ω 1 k Ω 10 k Ω 100 k Ω 1 M Ω 10 M Ω 100 M Ω From 10 V to 1 kV: 200 M Ω to 2 G Ω 2 G Ω to 20 G Ω 20 G Ω to 200 G Ω 200 G Ω to 2 T Ω From 1 kV to 5 kV: 200 M Ω to 2 G Ω 2 G Ω to 20 G Ω 20 G Ω to 200 G Ω 200 G Ω to 2 T Ω	160 $\mu\Omega/\Omega$ 45 $\mu\Omega/\Omega$ 41 $\mu\Omega/\Omega$ 37 $\mu\Omega/\Omega$ 6.7 $\mu\Omega/\Omega$ 6.4 $\mu\Omega/\Omega$ 6.4 $\mu\Omega/\Omega$ 6.5 $\mu\Omega/\Omega$ 6.7 $\mu\Omega/\Omega$ 14 $\mu\Omega/\Omega$ 15 $\mu\Omega/\Omega$ 150 $\mu\Omega/\Omega$ 0.031 % 0.037 % 0.042 % 0.12 % 0.15 % 0.15 % 0.16 % 0.19 %	Application of known resistance values for the calibration of resistance measuring instruments.	Bideford
DC VOLTAGE				
Generation	0 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V 1 kV to 30 kV	14 $\mu\text{V}/\text{V} + 0.12 \mu\text{V}$ 6.6 $\mu\text{V}/\text{V}$ 6.3 $\mu\text{V}/\text{V}$ 6.7 $\mu\text{V}/\text{V}$ 7.2 $\mu\text{V}/\text{V}$ 0.14 %	Application of known DC voltages for the calibration of voltage measuring instruments.	
Measurement	0 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V 1 kV to 40 kV	18 $\mu\text{V}/\text{V} + 0.16 \mu\text{V}$ 8.6 $\mu\text{V}/\text{V}$ 8.4 $\mu\text{V}/\text{V}$ 9.0 $\mu\text{V}/\text{V}$ 9.7 $\mu\text{V}/\text{V}$ 0.14 %		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
DC CURRENT				Bideford
Generation	10 pA to 200 pA 200 pA to 2 nA 2 nA to 20 nA 20 nA to 200 nA 200 nA to 2 μ A 2 μ A to 20 μ A 20 μ A to 200 μ A 200 μ A to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 1 A 1 A to 20 A 20 A to 100 A 100 A to 250 A 250 A to 375 A	0.056 % 0.034 % 0.029 % 0.023 % 0.019 % 0.014 % 11 μ A/A 11 μ A/A 12 μ A/A 14 μ A/A 22 μ A/A 46 μ A/A 0.10 % 0.12 % 0.32 %	Application of known DC currents for the calibration of current measuring instruments.	
Current clamp calibration	0 A to 20 A 0 A to 1000 A 1000 A to 5000 A	0.25 % + 10 μ A 0.34 % + 10 μ A 0.36 %	Using multi-turn coils: Single turn 10 or 50 turns 10 or 50 turns	
Measurement	10 pA to 200 pA 200 pA to 2 nA 2 nA to 20 nA 20 nA to 200 nA 200 nA to 2 μ A 2 μ A to 20 μ A 20 μ A to 200 μ A 200 μ A to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 1 A 1 A to 20 A 20 A to 100 A 100 A to 250 A 250 A to 1000 A	0.056 % 0.038 % 0.034 % 0.027 % 0.023 % 0.019 % 14 μ A/A 14 μ A/A 16 μ A/A 27 μ A/A 39 μ A/A 46 μ A/A 0.10 % 0.12 % 0.32 %		
AC VOLTAGE				
Generation				
Specific Values	10 Hz to 30 Hz 1 V 10 V 100 V 30 Hz to 300 Hz 10 mV 100 mV 1 V 10 V 100 V 1000 V	75 μ V/V 75 μ V/V 78 μ V/V 300 μ V/V 140 μ V/V 73 μ V/V 73 μ V/V 78 μ V/V 84 μ V/V	Application of known AC voltages for the calibration of voltage measuring instruments.	
			40 Hz minimum	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued)				Bideford
Generation (continued)	300 Hz to 1 kHz			
Specific Values	10 mV	300 $\mu\text{V/V}$		
	100 mV	120 $\mu\text{V/V}$		
	1 V	70 $\mu\text{V/V}$		
	10 V	70 $\mu\text{V/V}$		
	100 V	75 $\mu\text{V/V}$		
	1000 V	84 $\mu\text{V/V}$		
	1 kHz to 10 kHz			
	10 mV	310 $\mu\text{V/V}$		
	100 mV	130 $\mu\text{V/V}$		
	1 V	76 $\mu\text{V/V}$		
	10 V	76 $\mu\text{V/V}$		
	100 V	81 $\mu\text{V/V}$		
	1000 V	95 $\mu\text{V/V}$		
	10 kHz to 30 kHz			
	10 mV	370 $\mu\text{V/V}$		
	100 mV	220 $\mu\text{V/V}$		
	1 V	130 $\mu\text{V/V}$		
	10 V	130 $\mu\text{V/V}$		
	100 V	130 $\mu\text{V/V}$		
	1000 V	170 $\mu\text{V/V}$		
	30 kHz to 100 kHz			
	10 mV	460 $\mu\text{V/V}$		
	100 mV	360 $\mu\text{V/V}$		
	1 V	140 $\mu\text{V/V}$		
	10 V	150 $\mu\text{V/V}$		
	100 V	170 $\mu\text{V/V}$		
	700 V	470 $\mu\text{V/V}$		
	100 kHz to 300 kHz			
	1 V	710 $\mu\text{V/V}$		
	10 V	710 $\mu\text{V/V}$		
	300 kHz to 1 MHz			
	1 V	0.12 %		
	10 V	0.13 %		
Other Values	100 mHz to 10 Hz			
	V_{rms} 2.5 mV to 707 V		Using fast DC sampling techniques.	
	V_{pk} 1000 V maximum	0.15 % + 5.0 μV		
	10 Hz to 30 Hz			
	200 mV to 2 V	(190 to 83) $\mu\text{V/V}$	Application of known AC voltages for the calibration of voltage measuring instruments.	
	2 V to 20 V	(190 to 83) $\mu\text{V/V}$		
	20 V to 200 V	(190 to 85) $\mu\text{V/V}$		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued) Generation (continued) Other Values	<p><i>30 Hz to 300 Hz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>300 Hz to 1 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>1 kHz to 10 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>10 kHz to 30 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V</p> <p><i>30 kHz to 100 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 700 V</p>	<p>0.29 % to 0.12 % 0.12 % to 0.065 % (650 to 200) $\mu\text{V/V}$ (200 to 160) $\mu\text{V/V}$ (140 to 77) $\mu\text{V/V}$ (140 to 77) $\mu\text{V/V}$ (140 to 81) $\mu\text{V/V}$ (100 to 87) $\mu\text{V/V}$</p> <p>0.29 % to 0.12 % 0.12 % to 0.065 % (650 to 190) $\mu\text{V/V}$ (190 to 140) $\mu\text{V/V}$ (91 to 71) $\mu\text{V/V}$ (91 to 71) $\mu\text{V/V}$ (94 to 76) $\mu\text{V/V}$ (100 to 87) $\mu\text{V/V}$</p> <p>0.29 % to 0.12 % 0.12 % to 0.066 % (660 to 200) $\mu\text{V/V}$ (200 to 150) $\mu\text{V/V}$ (96 to 77) $\mu\text{V/V}$ (96 to 77) $\mu\text{V/V}$ (99 to 82) $\mu\text{V/V}$ (110 to 98) $\mu\text{V/V}$</p> <p>0.29 % to 0.12 % 0.12 % to 0.069 % (690 to 270) $\mu\text{V/V}$ (270 to 230) $\mu\text{V/V}$ (140 to 130) $\mu\text{V/V}$ (140 to 130) $\mu\text{V/V}$ (180 to 140) $\mu\text{V/V}$ (180 to 170) $\mu\text{V/V}$</p> <p>0.29 % to 0.12 % 0.12 % to 0.074 % (740 to 390) $\mu\text{V/V}$ (390 to 370) $\mu\text{V/V}$ (180 to 140) $\mu\text{V/V}$ (190 to 160) $\mu\text{V/V}$ (240 to 170) $\mu\text{V/V}$ (480 to 470) $\mu\text{V/V}$</p>	40 Hz minimum	Bideford



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued) Generation (continued) Other Values Measurement Specific Values	<i>100 kHz to 300 kHz</i> 200 mV to 2 V 2 V to 20 V <i>300 kHz to 1 MHz</i> 200 mV to 2 V 2 V to 20 V <i>At 50 Hz</i> 1 kV to 7 kV <i>10 Hz to 30 Hz</i> 1 V 10 V 100 V <i>30 Hz to 300 Hz</i> 10 mV 100 mV 1 V 10 V 100 V 1000 V <i>300 Hz to 1 kHz</i> 10 mV 100 mV 1 V 10 V 100 V 1000 V <i>1 kHz to 10 kHz</i> 10 mV 100 mV 1 V 10 V 100 V 1000 V <i>10 kHz to 30 kHz</i> 10 mV 100 mV 1 V 10 V 100 V 1000 V	(840 to 730) $\mu\text{V/V}$ (840 to 730) $\mu\text{V/V}$ 0.26 % to 0.13 % 0.27 % to 0.14 % 0.30 % 99 $\mu\text{V/V}$ 99 $\mu\text{V/V}$ 100 $\mu\text{V/V}$ 320 $\mu\text{V/V}$ 150 $\mu\text{V/V}$ 98 $\mu\text{V/V}$ 98 $\mu\text{V/V}$ 100 $\mu\text{V/V}$ 110 $\mu\text{V/V}$ 310 $\mu\text{V/V}$ 140 $\mu\text{V/V}$ 95 $\mu\text{V/V}$ 95 $\mu\text{V/V}$ 99 $\mu\text{V/V}$ 110 $\mu\text{V/V}$ 320 $\mu\text{V/V}$ 150 $\mu\text{V/V}$ 110 $\mu\text{V/V}$ 110 $\mu\text{V/V}$ 110 $\mu\text{V/V}$ 120 $\mu\text{V/V}$ 400 $\mu\text{V/V}$ 260 $\mu\text{V/V}$ 190 $\mu\text{V/V}$ 190 $\mu\text{V/V}$ 190 $\mu\text{V/V}$ 220 $\mu\text{V/V}$	40 Hz minimum	Bideford



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued) Measurement (continued) Specific Values	30 kHz to 100 kHz 10 mV 100 mV 1 V 10 V 100 V 700 V	500 $\mu\text{V/V}$ 410 $\mu\text{V/V}$ 230 $\mu\text{V/V}$ 240 $\mu\text{V/V}$ 250 $\mu\text{V/V}$ 500 $\mu\text{V/V}$		
	100 kHz to 300 kHz 1 V 10 V	930 $\mu\text{V/V}$ 930 $\mu\text{V/V}$		
	300 kHz to 1 MHz 1 V 10 V	0.14 % 0.15 %		
Measurement; other values	2.5 mV to 707 V 0.1 Hz to 10 Hz	0.15 % + 5.0 μV	Using fast DC sampling techniques.	
	10 Hz to 30 Hz 200 mV to 2 V 2 V to 20 V 20 V to 200 V	(150 to 100) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$		
	30 Hz to 300 Hz 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	0.23 % to 0.098 % (980 to 560) $\mu\text{V/V}$ (560 to 180) $\mu\text{V/V}$ (180 to 160) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (120 to 110) $\mu\text{V/V}$	40 Hz minimum	
	300 Hz to 1 kHz 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	0.12 % to 0.056 % (560 to 380) $\mu\text{V/V}$ (380 to 140) $\mu\text{V/V}$ 140 $\mu\text{V/V}$ (150 to 98) $\mu\text{V/V}$ (150 to 98) $\mu\text{V/V}$ (150 to 100) $\mu\text{V/V}$ (120 to 110) $\mu\text{V/V}$		
	1 kHz to 10 kHz 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	0.23 % to 0.098 % (980 to 560) $\mu\text{V/V}$ (560 to 180) $\mu\text{V/V}$ (180 to 160) $\mu\text{V/V}$ (160 to 110) $\mu\text{V/V}$ (160 to 110) $\mu\text{V/V}$ (160 to 110) $\mu\text{V/V}$ (140 to 130) $\mu\text{V/V}$		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued) Measurement (continued) Other Values	<i>10 kHz to 30 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V <i>30 kHz to 100 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 50 mV 50 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 700 V <i>100 kHz to 300 kHz</i> 200 mV to 2 V 2 V to 20 V <i>300 kHz to 1 MHz</i> 200 mV to 2 V 2 V to 20 V 1 kV to 28 kV, 40 Hz to 60 Hz 1 kV to 4 kV, 60 Hz to 1 kHz	0.46 % to 0.19 % 0.19 % to 0.10 % 0.10 % to 0.032 % (320 to 280) $\mu\text{V/V}$ (300 to 190) $\mu\text{V/V}$ (300 to 190) $\mu\text{V/V}$ (300 to 190) $\mu\text{V/V}$ (250 to 220) $\mu\text{V/V}$ 1.2 % to 0.46 % 0.46 % to 0.24 % 0.24 % to 0.062 % (620 to 470) $\mu\text{V/V}$ 0.12 % to 0.033 % 0.12 % to 0.034 % 0.12 % to 0.034 % (770 to 560) $\mu\text{V/V}$ 1.2 % to 0.25 % 1.2 % to 0.25 % 12 % to 2.3 % 12 % to 2.3 % 0.30 % 1.0 %		Bideford
AC CURRENT Generation (specific values)	100 μA <i>10 Hz to 55 Hz</i> <i>55 Hz to 1 kHz</i> <i>1 kHz to 5 kHz</i> <i>5 kHz to 10 kHz</i> 1 mA <i>10 Hz to 55 Hz</i> <i>55 Hz to 1 kHz</i> <i>1 kHz to 5 kHz</i> <i>5 kHz to 10 kHz</i> 10 mA <i>10 Hz to 55 Hz</i> <i>55 Hz to 1 kHz</i> <i>1 kHz to 5 kHz</i> <i>5 kHz to 10 kHz</i>	170 $\mu\text{A/A}$ 170 $\mu\text{A/A}$ 240 $\mu\text{A/A}$ 610 $\mu\text{A/A}$ 150 $\mu\text{A/A}$ 130 $\mu\text{A/A}$ 180 $\mu\text{A/A}$ 530 $\mu\text{A/A}$ 150 $\mu\text{A/A}$ 75 $\mu\text{A/A}$ 75 $\mu\text{A/A}$ 92 $\mu\text{A/A}$	Application of known AC currents for the calibration of current measuring instruments.	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT (continued) Generation (specific values) (continued) Generation (other values)	100 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 1 A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 10 μ A to 20 μ A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 20 μ A to 200 μ A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 200 μ A to 2 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 2 mA to 20 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 20 mA to 200 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 200 mA to 1 A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	150 μ A/A 75 μ A/A 75 μ A/A 92 μ A/A 180 μ A/A 96 μ A/A 110 μ A/A 120 μ A/A 290 μ A/A 290 μ A/A 340 μ A/A 650 μ A/A 170 μ A/A 170 μ A/A 270 μ A/A 630 μ A/A 160 μ A/A 140 μ A/A 210 μ A/A 560 μ A/A 160 μ A/A 88 μ A/A 140 μ A/A 200 μ A/A 160 μ A/A 88 μ A/A 140 μ A/A 200 μ A/A 190 μ A/A 120 μ A/A 360 μ A/A 480 μ A/A	Application of known AC currents for the calibration of current measuring instruments.	Bideford



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT (continued)				
Generation (other values, continued)	1 A to 20 A 30 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz	190 μ A/A 120 μ A/A 170 μ A/A		
Current clamp calibration	10 Hz to 5 kHz 100 μ A to 1 A	0.26 %	Using multi-turn coils: Single turn	
	30 Hz to 5 kHz 1 A to 20 A	0.26 %	Single turn	
	30 Hz to 100 Hz 3.2 A to 1000 A	0.66 %	10 or 50 turns	
	100 Hz to 440 Hz 3.2 A to 1000 A	1.8 %	10 or 50 turns	
Measurement (specific values)	100 μ A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	180 μ A/A 180 μ A/A 250 μ A/A 620 μ A/A	Measurement of AC current using digital multimeter and current shunt.	
	1 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	170 μ A/A 150 μ A/A 190 μ A/A 540 μ A/A		
	10 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	170 μ A/A 100 μ A/A 100 μ A/A 130 μ A/A		
	100 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	170 μ A/A 110 μ A/A 110 μ A/A 130 μ A/A		
	1 A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	200 μ A/A 120 μ A/A 140 μ A/A 160 μ A/A		

Bideford



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT (continued) Measurement (other values)	10 μ A to 20 μ A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 20 μ A to 200 μ A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 200 μ A to 2 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 2 mA to 20 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 20 mA to 200 mA 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 200 mA to 1 A 10 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz 1 A to 20 A 30 Hz to 55 Hz 55 Hz to 1 kHz 1 kHz to 5 kHz	300 μ A/A 300 μ A/A 350 μ A/A 660 μ A/A 190 μ A/A 190 μ A/A 280 μ A/A 640 μ A/A 170 μ A/A 160 μ A/A 220 μ A/A 560 μ A/A 170 μ A/A 110 μ A/A 160 μ A/A 220 μ A/A 180 μ A/A 120 μ A/A 160 μ A/A 220 μ A/A 220 μ A/A 150 μ A/A 510 μ A/A 670 μ A/A 190 μ A/A 120 μ A/A 170 μ A/A		Bideford



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC PHASE ANGLE			Using FFT Analyser	Bideford
Voltage : Voltage, square wave	0° to 360° 0.1 Hz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz	0.0049° 0.0077° 0.022°		
Voltage : Voltage, sine wave	0° to 360° 10 mV to 30 V, 10 Hz to 1 kHz 10 mV to 30 V, 1 kHz to 5 kHz 30 V to 300 V, 10 Hz to 1 kHz 30 V to 300 V, 1 kHz to 5 kHz	0.0059° 0.0082° 0.0084° 0.011°		
Voltage : Current, sine wave	0° to 360° 10 mV to 300 V 10 mA to 1.5 A 10 Hz to 1 kHz	0.0085°		
	0° to 360° 10 mV to 300 V 10 mA to 1.5 A 1 kHz to 5 kHz	0.013°		
	0° to 360° 10 mV to 300 V 1.5 A to 6 A 10 Hz to 1 kHz	0.0087°		
	0° to 360° 10 mV to 300 V 1.5 A to 6 A 1 kHz to 5 kHz	0.016°		
	0° to 360° 10 mV to 300 V 6 A to 20 A 10 Hz to 1 kHz	0.014°		
	0° to 360° 10 mV to 300 V 6 A to 20 A 1 kHz to 5 kHz	0.059°		
Current : Current, sine wave	0° to 360° 10 mA to 1.5 A 10 Hz to 1 kHz	0.0062°		
	0° to 360° 10 mA to 1.5 A 1 kHz to 5 kHz	0.011°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC PHASE ANGLE (continued)			Using FFT Analyser	
Current: Current, sine wave (continued)	0° to 360° 1.5 A to 6 A 10 Hz to 1 kHz	0.0068°		
	0° to 360° 1.5 A to 6 A 1 kHz to 5 kHz	0.018°		
	0° to 360° 6 A to 20 A 10 Hz to 1 kHz	0.017°		
	0° to 360° 6 A to 20 A 1 kHz to 5 kHz	0.082°		
DC and AC POWER			Measurement and generation, using phantom load techniques	Bideford
	DC 0.1 nW to 100 kW (voltage 10 mV to 1 kV; current 10 pA to 100 A).	The RSS summation of the CMCs for voltage and current. See examples below for further details.		
	10 Hz to 5 kHz 0 W to 6 kW (voltage 10 mV to 300 V; current 10 mA to 20 A).	The RSS summation of the CMCs for voltage, current and power factor ($\cos(\Phi)$). See examples below for further details.		
Example DC power CMCs from 10 mV to 1 kV:	10 pA to 200 pA 200 pA to 2 nA 2 nA to 20 nA 20 nA to 200 nA 200 nA to 2 μ A 2 μ A to 20 μ A 20 μ A to 20 A 20 A to 100 A	560 μ W/W 380 μ W/W 340 μ W/W 270 μ W/W 230 μ W/W 190 μ W/W 47 μ W/W 0.15 %		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge		Range		Expanded Measurement Uncertainty ($k = 2$)		Remarks		Location code	
DC and AC POWER (continued) Example AC Power CMCs		Voltage 200 mV to 200 V Current 10 mA to 1 A Frequency 10 Hz to 30 Hz							
									Phase
				0°	220				220
				45°	260				190
				70°	460				160



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge		Range		Expanded Measurement Uncertainty (<i>k</i> = 2)		Remarks		Location code
DC and AC POWER (continued)								Bideford
Example AC Power CMCs (continued)								
Voltage Range	Phase	1 kHz to 5 kHz						
		10 mA to 1.6 A		1.6 A to 6 A		6 A to 20 A		
10 mV to 50 mV	0°	μW/W 400	μW/VA 400	μW/W 250	μW/VA 250	μW/W 250	μW/VA 250	
	45°	460	330	370	260	1100	750	
	70°	740	250	810	280	2800	970	
	90°		230		280		1000	
50 mV to 200 mV	0°	390	390	230	230	230	230	
	45°	460	320	360	260	1100	750	
	70°	740	250	800	270	2800	970	
	90°		230		280		1000	
200 mV to 300 V	0°	380	380	210	210	210	210	
	45°	450	320	350	250	1100	740	
	70°	730	250	800	270	2800	970	
	90°		230		280		1000	
						NOTE		
						The example CMCs for AC Power are shown both in terms of μW/W and μW/VA and may be expressed using either term for most of the phase (power factor) range. However, at low values of power factor, the uncertainties in μW/W terms approach infinity, so the μW/VA terminology will normally be used in these circumstances.		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
<p>AC HARMONICS AND DISTORTION</p> <p>NOTE</p> <p>The total harmonic distortion of a repetitive waveform (THD) is often defined as the ratio of the RMS values of the harmonics with reference to that of the fundamental. This is referred to herein as THD_F.</p> <p>Certain types of distortion analyser use a broad band voltmeter in conjunction with a notch filter. The total signal (including harmonics) is used as a "100 % reference"; the notch filter is then used to remove the fundamental and the residue is displayed as the "THD". This is referred to herein as THD_R, the subscript R referring to the RMS value of the reference voltage.</p> <p>It should be noted that THD_R cannot exceed 100 % as the total signal is used as the reference, whereas THD_F can have any value. At relatively low values, the two converge, e.g., if $THD_F = 10 \%$ then $THD_R = 9.5 \%$. At higher values of THD the differences between the two can be very significant indeed.</p> <p>For this reason, the capabilities described below distinguish clearly between the two definitions.</p>				Bideford
Generation of Harmonic Distortion, THD_R and THD_F	THD_R 0.006 % to 100 % THD_F 0.006 % to 1000 % 30 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.62 % to 5.7 % 0.85 % to 5.8 % 1.7 % to 6.4 %	Fundamental: 3 mV to 300 V, 30 Hz to 20 kHz. Harmonic(s): 3 μ V to 300 V. Not all combinations of voltage and frequency may be available.	
Measurement of Harmonic Distortion, THD_R and THD_F	THD_R 0.00032 % to 100 % THD_F 0.00032 % to 1000 % 30 Hz to 100 kHz	0.73 % to 1.8 %	Fundamental: 3 mV to 300 V, 30 Hz to 20 kHz. Harmonic(s): 3 μ V to 300 V	
Harmonic Amplitude Measurement and Generation	3 μ V to 300 V 30 Hz to 100 kHz	0.90 % to 1.7 %		
Flicker Measurement and Generation	Pst values from 0.4 to 6, with 1 to 500 changes per minute.	0.37 %	In accordance with EN61000-4-15	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
CAPACITANCE Measurement and generation	<i>At 100 Hz:</i> 100 pF to 190 pF 190 pF to 350 pF 350 pF to 1 nF 1 nF to 1 μ F 1 μ F to 100 μ F <i>At 1 kHz:</i> 10 pF to 15 pF 15 pF to 25 pF 25 pF to 100 pF 100 pF to 1 μ F 1 μ F to 100 μ F <i>At 10 kHz:</i> 10 pF to 25 pF 25 pF to 70 pF 70 pF to 100 nF 100 nF to 1 μ F	0.60 % 0.26 % 0.17 % 0.080 % 0.10 % 0.62 % 0.32 % 0.24 % 0.080 % 0.10 % 0.32 % 0.24 % 0.080 % 0.085 %	Using standard capacitors and LCR meter.	Bideford
INDUCTANCE Measurement and Generation	<i>At 100 Hz:</i> 100 μ H to 250 μ H 250 μ H to 600 μ H 600 μ H to 1 mH 1 mH to 100 mH 100 mH to 1 H <i>At 1 kHz:</i> 10 μ H to 25 μ H 25 μ H to 60 μ H 60 μ H to 100 μ H 100 μ H to 150 μ H 150 μ H to 1 H <i>At 10 kHz:</i> 10 μ H to 20 μ H 20 μ H to 1 mH 1 mH to 10 mH 10 mH to 100 mH	0.59 % 0.25 % 0.15 % 0.11 % 0.27 % 0.59 % 0.25 % 0.14 % 0.14 % 0.092 % 0.14 % 0.099 % 0.092 % 0.13 %	Using standard inductors and LCR meter.	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code
FREQUENCY MEASUREMENT Specific Value	10 MHz	1 in 10 ¹⁰	Can be expressed as average periodic time (1/f) for repetitive waveforms.	Bideford
Other Values	1 Hz to 1 GHz 1 GHz to 40 GHz	12 in 10 ⁹ 1.3 in 10 ⁹		
TIME INTERVAL	100 ps to 1 ns 1 ns to 10 ns 10 ns to 100 ns 100 ns to 1 μs 1 μs to 100 μs 100 μs to 1 ms 1 ms to 10 ms 10 ms to 100 ms 100 ms to 10 ⁵ s	3.3 % 0.36 % 0.12 % 120 μs/s 15 μs/s 4.0 μs/s 400 in 10 ⁹ 43 in 109 15 in 10 ⁹ + 400 ps	<div>Repetitive and Single Event</div>	
PULSE TRANSITION TIME				
Measurement	150 ps to 500 ps 500 ps to 10 s	1.3 % 0.91 %	Using fast rise oscilloscope; for the calibration of Waveform Generators	
Generation	500 ps to 10 s	1.6 %	Using fast rise pulse generator; for the calibration of oscilloscopes and other measurement devices	
ELECTRICAL SIMULATION OF TEMPERATURE				
Measurement and Generation				
Thermocouple Simulation				
Type K	-270 °C to +1372 °C	0.12 °C to 0.30 °C	<div>By millivolt injection; excluding cold junction compensation</div>	
Type J	-210 °C to +1200 °C	0.12 °C to 0.23 °C		
Type E	-270 °C to +1000 °C	0.12 °C to 0.22 °C		
Type N	-270 °C to +1300 °C	0.12 °C to 0.27 °C		
Type T	-270 °C to +400 °C	0.12 °C to 0.22 °C		
Type S	0 °C to 1768 °C	0.18 °C to 0.29 °C		
Type R	0 °C to 1768 °C	0.17 °C to 0.28 °C		
Type B	0 °C to 1820 °C	0.19 °C to 0.34 °C		
Thermocouple CJC	Ambient (23 °C)	0.13 °C		
PRT Simulation	-200 °C to 0 °C 0 °C to 400 °C 400 °C to 850 °C	0.027 °C to 0.049 °C 0.049 °C to 0.12 °C 0.12 °C to 0.21 °C	By application of equivalent DC resistance values.	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range		Expanded Measurement Uncertainty (<i>k</i> = 2)		Remarks	Location code		
RF POWER						Bideford		
The CMCs below are for the measurement of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the measurement of sources, such as signal generators and synthesisers.								
Type N coaxial systems								
Frequency range		-60 dBm to -50 dBm		-50 dBm to -40 dBm			-40 dBm to -20 dBm	
9 kHz to 10 MHz		1.6 %		1.5 %			1.2 %	
Frequency range		-62 dBm to -55 dBm		-55 dBm to -20 dBm			-20 dBm to +20 dBm	
9 kHz to 10 MHz				1.3 %			2.2 %	
10 MHz to 50 MHz		1.4 %		1.3 %			2.2 %	
50 MHz to 1 GHz		1.5 %		1.3 %			2.0 %	
1 GHz to 5 GHz		1.6 %		1.3 %			2.0 %	
5 GHz to 10 GHz		2.0 %		1.4 %			2.1 %	
10 GHz to 12.5 GHz		2.1 %		1.5 %			2.6 %	
12.5 GHz to 15 GHz		2.1 %		1.5 %			2.7 %	
15 GHz to 18 GHz		2.3 %		1.6 %			2.7 %	
3.5 mm coaxial systems								
Frequency range		-62 dBm to -55 dBm		-55 dBm to -20 dBm			-20 dBm to +20 dBm	
50 MHz to 1 GHz		1.6 %		1.5 %			1.4 %	
1 GHz to 5 GHz		1.6 %		1.5 %			1.4 %	
5 GHz to 10 GHz		1.7 %		1.6 %			1.5 %	
10 GHz to 15 GHz		2.0 %		1.9 %			1.6 %	
15 GHz to 20 GHz		2.6 %		2.5 %			2.0 %	
20 GHz to 26.5 GHz		3.4 %		3.3 %			2.3 %	
2.92 mm coaxial systems								
Frequency range		-62 dBm to -55 dBm		-55 dBm to -20 dBm			-20 dBm to +20 dBm	
50 MHz to 1 GHz		1.7 %		1.7 %			1.4 %	
1 GHz to 5 GHz		1.8 %		1.7 %			1.5 %	
5 GHz to 10 GHz		1.9 %		1.9 %			1.7 %	
10 GHz to 15 GHz		2.1 %		2.0 %			1.7 %	
15 GHz to 20 GHz		2.4 %		2.4 %			2.0 %	
20 GHz to 25 GHz		2.5 %		2.5 %		2.0 %		
25 GHz to 30 GHz		3.1 %		3.1 %		2.3 %		
30 GHz to 35 GHz		3.7 %		3.7 %		2.3 %		
35 GHz to 40 GHz		4.8 %		4.8 %		2.3 %		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code
RF POWER (continued)				Bideford
The CMCs below are for the measurement of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the measurement of sources, such as signal generators and synthesisers.				
2.4 mm coaxial systems				
Frequency range	-62 dBm to -55 dBm	-55 dBm to -20 dBm	-20 dBm to +20 dBm	
50 MHz to 1 GHz	1.7 %	1.6 %	1.4 %	
1 GHz to 5 GHz	1.8 %	1.7 %	1.4 %	
5 GHz to 10 GHz	1.9 %	1.8 %	1.6 %	
10 GHz to 15 GHz	2.0 %	2.0 %	1.7 %	
15 GHz to 20 GHz	2.4 %	2.3 %	2.0 %	
20 GHz to 25 GHz	2.6 %	2.6 %	2.0 %	
25 GHz to 30 GHz	2.9 %	2.9 %	2.1 %	
30 GHz to 35 GHz	3.2 %	3.1 %	2.3 %	
35 GHz to 40 GHz	3.8 %	3.7 %	2.7 %	
Specific value	1 mW, 50 MHz Type N coaxial systems 3.5 mm coaxial systems 2.92 mm coaxial systems 2.4 mm coaxial systems	0.65 % 0.69 % 0.80 % 0.69 %	For the measurement of sources, including the calibrator output of RF power meters.	Bideford
The CMCs below are for the generation of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the calibration of receivers, spectrum analysers and similar items.				
Type N coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +20 dBm	
9 kHz to 10 MHz	1.5 %	1.3 %	1.3 %	
10 MHz to 50 MHz	1.5 %	1.3 %	1.3 %	
50 MHz to 1 GHz	1.5 %	1.3 %	1.3 %	
1 GHz to 5 GHz	1.5 %	1.4 %	1.3 %	
5 GHz to 10 GHz	1.7 %	1.5 %	1.4 %	
10 GHz to 15 GHz	1.7 %	1.5 %	1.4 %	
15 GHz to 18 GHz	2.2 %	1.7 %	1.6 %	
Frequency range	+20 dBm to +34 dBm	+20 dBm to +47 dBm	+47 dBm to +55 dBm	Bideford
9 kHz to 10 MHz		2.1 %	4.7 %	
10 MHz to 50 MHz		2.1 %	4.7 %	
50 MHz to 1 GHz		2.1 %	4.7 %	
1 GHz to 3 GHz	2.4 %			



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF POWER (continued)				Bideford
The CMCs below are for the generation of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the calibration of receivers, spectrum analysers and similar items.				
3.5 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +14 dBm	
50 MHz to 1 GHz	1.7 %	1.4 %	1.4 %	
1 GHz to 5 GHz	1.6 %	1.5 %	1.4 %	
5 GHz to 10 GHz	1.7 %	1.6 %	1.5 %	
10 GHz to 15 GHz	2.0 %	1.9 %	1.9 %	
15 GHz to 20 GHz	2.5 %	2.4 %	2.2 %	
20 GHz to 26.5 GHz	2.9 %	2.9 %	2.4 %	
2.92 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +14 dBm	
50 MHz to 1 GHz	1.7 %	1.5 %	1.4 %	
1 GHz to 5 GHz	1.7 %	1.6 %	1.5 %	
5 GHz to 10 GHz	1.9 %	1.8 %	1.7 %	
10 GHz to 15 GHz	2.0 %	1.9 %	1.8 %	
15 GHz to 20 GHz	2.4 %	2.3 %	2.4 %	
20 GHz to 25 GHz	2.5 %	2.3 %	2.5 %	
25 GHz to 30 GHz	2.9 %	2.8 %	3.0 %	
30 GHz to 35 GHz	3.3 %	3.3 %	3.1 %	
35 GHz to 40 GHz	3.6 %	3.5 %	3.4 %	
2.4 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +14 dBm	
50 MHz to 1 GHz	1.6 %	1.4 %	1.4 %	
1 GHz to 5 GHz	1.7 %	1.5 %	1.6 %	
5 GHz to 10 GHz	1.8 %	1.6 %	1.7 %	
10 GHz to 15 GHz	1.9 %	1.8 %	1.8 %	
15 GHz to 20 GHz	2.3 %	2.2 %	2.2 %	
20 GHz to 25 GHz	2.6 %	2.4 %	2.7 %	
25 GHz to 30 GHz	2.9 %	2.8 %	2.9 %	
30 GHz to 35 GHz	3.1 %	3.0 %	3.0 %	
35 GHz to 40 GHz	4.0 %	3.9 %	4.1 %	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)		Remarks	Location code
RF CALIBRATION FACTOR	Type N 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm	For calibration of RF power sensors by comparison with standard sensors. Values of calibration factor between 30 % and 140 % may be reported; these represent the percentage of the reported calibration factor.	Bidford
	9 kHz to 10 MHz	0.62 %	0.66 %		
	10 MHz to 50 MHz	0.62 %	0.65 %		
	50 MHz to 1 GHz	0.72 %	0.75 %		
	1 GHz to 5 GHz	0.75 %	0.85 %		
	5 GHz to 10 GHz	0.83 %	1.3 %		
	10 GHz to 15 GHz	0.98 %	1.4 %		
	15 GHz to 18 GHz	1.1 %	1.6 %		
	3.5 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.77 %	0.86 %		
	1 GHz to 5 GHz	0.824 %	0.93 %		
	5 GHz to 10 GHz	1.0 %	1.1 %		
	10 GHz to 15 GHz	1.4 %	1.5 %		
	15 GHz to 20 GHz	1.9 %	2.2 %		
	20 GHz to 26.5 GHz	2.6 %	3.1 %		
	2.92 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.80 %	1.1 %		
	1 GHz to 5 GHz	0.96 %	1.2 %		
	5 GHz to 10 GHz	1.3 %	1.4 %		
	10 GHz to 15 GHz	1.5 %	1.6 %		
	15 GHz to 20 GHz	2.1 %	2.0 %		
	20 GHz to 25 GHz	2.3 %	2.1 %		
	25 GHz to 30 GHz	2.7 %	2.7 %		
	30 GHz to 35 GHz	3.2 %	3.4 %		
	35 GHz to 40 GHz	3.2 %	4.6 %		
	2.4 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.79 %	0.90 %		
	1 GHz to 5 GHz	0.91 %	1.0 %		
	5 GHz to 10 GHz	1.1 %	1.2 %		
	10 GHz to 15 GHz	1.3 %	1.4 %		
	15 GHz to 20 GHz	1.8 %	1.8 %		
	20 GHz to 25 GHz	2.1 %	2.1 %		
	25 GHz to 30 GHz	2.6 %	2.5 %		
	30 GHz to 35 GHz	2.8 %	2.8 %		
	35 GHz to 40 GHz	3.2 %	3.4 %		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF VOLTAGE	200 μ V to 1 mV 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 1 mV to 10 mV 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 10 mV to 1 V 9 kHz to 20 kHz 20 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 1 V to 10 V 9 kHz to 20 kHz 20 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz	1.1 % 1.1 % 1.1 % 1.4 % 2.1 % 0.96 % 0.96 % 0.96 % 1.3 % 2.1 % 0.80 % 0.80 % 0.80 % 1.2 % 2.1 % 0.74 % 0.99 % 0.99 % 1.7 % 2.8 %	50 Ω systems only Derived from RF Power measurements.	Bideford
VOLTAGE REFLECTION COEFFICIENT	5 MHz to 1 GHz 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0 1 GHz to 2 GHz 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0 2 GHz to 5 GHz 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0	0.016 0.019 0.030 0.090 0.16 0.022 0.023 0.029 0.077 0.11 0.021 0.034 0.065 0.22 0.32	50 Ω systems only. Reflection bridge method.	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code
VOLTAGE REFLECTION COEFFICIENT (continued)	<i>5 GHz to 10 GHz</i> 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0 <i>10 GHz to 15 GHz</i> 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0 <i>15 GHz to 18 GHz</i> 0.00 to 0.05 0.05 to 0.1 0.1 to 0.2 0.2 to 0.7 0.7 to 1.0	0.026 0.028 0.038 0.11 0.14 0.033 0.035 0.042 0.093 0.13 0.035 0.038 0.050 0.13 0.18		Bideford
LF VECTOR NETWORK ANALYSIS				
This section of the Schedule presents the CMCs for a vector network analysis system. Measurements are made as complex quantities. Transmission magnitude capabilities are expressed in dB terms and reflection magnitude is expressed in terms of voltage reflection coefficient (VRC). These may also be reported in terms of voltage standing wave ratio (VSWR), return loss (dB) or Impedance magnitude and phase. Measurements are made in a 50 Ω coaxial system using an Agilent E5061B network analyser with appropriate test port leads in a 10 Hz bandwidth and 1 Hz bandwidth for transmission measurements greater than 70 dB.				
N Type 50 Ω system				
Reflection magnitude	VRC 0 to 0.1 <i>1 kHz to 1 MHz</i> <i>1 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 3 GHz</i> VRC 0.1 to 0.5 <i>1 kHz to 1 MHz</i> <i>1 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 3 GHz</i>	0.0017 to 0.0022 0.0017 to 0.0019 0.0017 to 0.0024 0.0022 to 0.0034 0.0017 to 0.0030 0.0017 to 0.0029 0.0017 to 0.0061 0.0024 to 0.0084		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
Reflection magnitude (continued)	VRC 0.5 to 1.0 1 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 3 GHz	0.0021 to 0.0048 0.0021 to 0.0048 0.0022 to 0.013 0.0041 to 0.019		Bideford
Reflection phase	VRC 0 to 0.0004 1 kHz to 3 GHz	180°		
	VRC 0.0004 to 0.001 1 kHz to 3 GHz	100° to 180°		
	VRC 0.001 to 0.01 1 kHz to 3 GHz	20° to 170°		
	VRC 0.01 to 1 1 kHz to 3 GHz	0.12° to 34°		
Transmission magnitude	0 dB to 20 dB 1 kHz to 2 GHz 2 GHz to 3 GHz	0.0032 dB to 0.055 dB 0.029 dB to 0.090 dB		
	20 dB to 70 dB 1 kHz to 3 GHz	0.052 dB to 0.13 dB		
	70 dB to 80 dB 1 kHz to 3 GHz	0.10 dB to 0.17 dB		
	80 dB to 90 dB 1 kHz to 3 GHz	0.13 dB to 0.41 dB		
	90 dB to 100 dB 1 kHz to 3 GHz	0.33 dB to 1.8 dB		
Transmission phase	0° to ± 180° 1 kHz to 3 GHz Transmission 0 dB to 20 dB Transmission 20 dB to 70 dB Transmission 70 dB to 80 dB Transmission 80 dB to 90 dB Transmission 90 dB to 100 dB	0.0030° to 0.84° 0.77° to 9.6° 10° to 12° 12° to 14° 14° to 18°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
AUTOMATIC NETWORK ANALYSER SYSTEM; VOLTAGE TRANSMISSION COEFFICIENT MAGNITUDE AND PHASE: The CMCs are for 50Ω coaxial systems fitted with Type N, 3.5 mm, 2.92 mm or 2.4 mm connectors over the frequency ranges as specified below. The CMCs are presented in dB terms for magnitude and in degrees for phase .			

Type N systems	0 dB	to	30 dB	30 dB	to	40 dB	40 dB	to	50 dB	50 dB	to	60 dB
10 MHz to 100 MHz Magnitude	0.032	to	0.067	0.032	to	0.19	0.035	to	0.59	0.054	to	1.9
Phase	0.57	to	0.71	0.60	to	1.4	0.60	to	3.9	0.66	to	12
100 MHz to 1 GHz Magnitude	0.032	to	0.032	0.032	to	0.033	0.032	to	0.044	0.032	to	0.10
Phase	0.57	to	0.60	0.60	to	0.60	0.60	to	0.63	0.60	to	0.88
1 GHz to 12 GHz Magnitude	0.032	to	0.042	0.032	to	0.042	0.032	to	0.042	0.032	to	0.043
Phase	0.57	to	0.98	0.60	to	0.98	0.60	to	0.98	0.60	to	0.98
12 GHz to 18 GHz Magnitude	0.042	to	0.049	0.042	to	0.049	0.042	to	0.049	0.042	to	0.050
Phase	0.97	to	1.3	0.99	to	1.3	0.99	to	1.3	0.99	to	1.3
Type N systems	60 dB	to	70 dB	70 dB	to	80 dB	80 dB	to	90 dB			
10 MHz to 100 MHz Magnitude	0.14	to	1.9	0.44	to	4.1	14	to	13			
Phase	1.1	to	12	2.9	to	27	9.1	to	85			
100 MHz to 1 GHz Magnitude	0.034	to	0.31	0.048	to	0.97	0.12	to	3.1			
Phase	0.60	to	2.1	0.64	to	0.64	0.96	to	20			
1 GHz to 12 GHz Magnitude	0.033	to	0.050	0.045	to	0.12	0.095	to	0.36			
Phase	0.60	to	1.0	0.63	to	1.1	0.89	to	2.5			
12 GHz to 18 GHz Magnitude	0.043	to	0.056	0.050	to	0.090	0.096	to	0.27			
Phase	0.99	to	1.3	1.0	to	1.4	1.1	to	2.2			
3.5 mm systems	0 dB	to	30 dB	30 dB	to	40 dB	40 dB	to	50 dB	50 dB	to	60 dB
45 MHz to 100 MHz Magnitude	0.032	to	0.34	0.032	to	0.052	0.035	to	0.13	0.054	to	0.41
Phase	0.57	to	0.60	0.60	to	0.66	0.60	to	1.0	0.66	to	2.8
100 MHz to 1 GHz Magnitude	0.032	to	0.032	0.032	to	0.033	0.032	to	0.044	0.032	to	0.10
Phase	0.57	to	0.60	0.60	to	0.60	0.60	to	0.63	0.60	to	0.88
1 GHz to 12 GHz Magnitude	0.032	to	0.042	0.032	to	0.042	0.032	to	0.042	0.032	to	0.043
Phase	0.57	to	0.98	0.60	to	0.98	0.60	to	0.98	0.60	to	0.98
12 GHz to 26.5 GHz Magnitude	0.042	to	0.063	0.042	to	0.063	0.042	to	0.063	0.042	to	0.064
Phase	0.97	to	1.7	0.99	to	1.7	0.99	to	1.7	0.99	to	1.7
3.5 mm systems	60 dB	to	70 dB	70 dB	to	80 dB	80 dB	to	90 dB			
45 MHz to 100 MHz Magnitude	0.14	to	1.3	0.044	to	4.1	1.4	to	13			
Phase	1.1	to	8.6	2.9	to	27	9.1	to	85			
100 MHz to 1 GHz Magnitude	0.034	to	0.31	0.048	to	0.97	0.12	to	3.1			
Phase	0.60	to	5.1	0.64	to	6.4	0.96	to	20			
1 GHz to 12 GHz Magnitude	0.033	to	0.050	0.045	to	0.12	0.095	to	0.36			
Phase	0.60	to	1.0	0.63	to	1.1	0.89	to	2.5			
12 GHz to 26.5 GHz Magnitude	0.043	to	0.069	0.050	to	0.11	0.096	to	0.28			
Phase	0.99	to	1.7	1.0	to	1.8	1.5	to	2.5			



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

2.92 mm systems	0 dB	to	30 dB	30 dB	to	40 dB	40 dB	to	50 dB	50 dB	to	60 dB
45 MHz to 100 MHz Magnitude Phase	0.032 0.28	to to	0.034 0.35	0.032 0.34	to to	0.052 0.44	0.035 0.35	to to	0.13 0.92	0.054 0.45	to to	0.41 2.7
100 MHz to 1 GHz Magnitude Phase	0.032 0.28	to to	0.032 0.34	0.032 0.34	to to	0.033 0.35	0.032 0.34	to to	0.044 0.40	0.032 0.34	to to	0.10 0.73
1 GHz to 26.5 GHz Magnitude Phase	0.032 0.28	to to	0.059 1.2	0.032 0.34	to to	0.059 1.2	0.032 0.34	to to	0.059 1.2	0.032 0.34	to to	0.060 1.2
26.5 GHz to 40 GHz Magnitude Phase	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.092 2.1
2.92 mm systems	60 dB	to	70 dB	70 dB	to	80 dB	80 dB	to	90 dB			
45 MHz to 100 MHz Magnitude Phase	0.14 0.97	to to	1.3 8.5	0.44 2.9	to to	4.1 27	1.4 9.1	to to	13 85			
100 MHz to 1 GHz Magnitude Phase	0.034 0.35	to to	0.31 2.1	0.048 0.42	to to	0.97 6.4	0.12 0.83	to to	3.1 20			
1 GHz to 26.5 GHz Magnitude Phase	0.033 0.35	to to	0.065 1.2	0.045 0.40	to to	0.12 1.4	0.095 0.75	to to	0.36 2.4			
26.5 GHz to 40 GHz Magnitude Phase	0.060 1.2	to to	0.11 2.2	0.065 1.3	to to	0.22 2.5	0.10 1.4	to to	0.64 4.7			
2.4 mm systems	0 dB	to	30 dB (50 dB)	30 dB (50 dB)	to	40 dB	40 dB	to	50 dB	50 dB	to	60 dB
50 MHz to 1 GHz Magnitude Phase	0.032 0.28	to to	0.034 0.35	0.032 0.34	to to	0.052 0.44	0.035 0.35	to to	0.13 0.92	0.054 0.45	to to	0.41 2.7
1 GHz to 5 GHz Magnitude Phase	0.032 0.28	to to	0.032 0.34	0.032 0.34	to to	0.033 0.35	0.032 0.34	to to	0.044 0.40	0.032 0.34	to to	0.10 0.73
5 GHz to 26.5 GHz Magnitude Phase	0.032 0.28	to to	0.059 1.2	0.032 0.34	to to	0.059 1.2	0.032 0.34	to to	0.059 1.2	0.032 0.34	to to	0.060 1.2
26.5 GHz to 40 GHz Magnitude Phase	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.090 2.1	0.059 1.2	to to	0.092 2.1
2.4 mm systems	60 dB	to	70 dB (50 dB)	70 dB (50 dB)	to	80 dB	80 dB	to	90 dB			
50 MHz to 1 GHz Magnitude Phase	0.14 0.97	to to	1.3 8.5	0.44 2.9	to to	4.1 27	1.4 9.1	to to	13 85			
1 GHz to 5 GHz Magnitude Phase	0.034 0.35	to to	0.31 2.1	0.048 0.42	to to	0.97 6.7	0.12 0.83	to to	3.1 20			
5 GHz to 26.5 GHz Magnitude Phase	0.033 0.35	to to	0.065 1.2	0.045 0.40	to to	0.12 1.4	0.095 0.75	to to	0.36 2.4			
26.5 GHz to 40 GHz Magnitude Phase	0.060 1.2	to to	0.11 2.2	0.065 1.3	to to	0.22 2.5	0.10 1.4	to to	0.64 4.7			



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
AUTOMATIC NETWORK ANALYSER SYSTEM		Location Code: Bideford	
VOLTAGE REFLECTION COEFFICIENT MAGNITUDE: The CMCs are for 50Ω coaxial systems fitted with Type N, 3.5 mm, 2.92 mm or 2.4 mm connectors over the frequency ranges as specified below. The CMCs are presented in VRC terms.			

Connector type	Frequency	VRC range 0.0 to 0.2		VRC range 0.2 to 1.0	
Type N	10 MHz to 1 GHz	0.0016	to 0.0021	0.0017	to 0.0040
	1 GHz to 12 GHz	0.0020	to 0.0032	0.0020	to 0.0051
	12 GHz to 18 GHz	0.0026	to 0.0041	0.0026	to 0.0052
3.5 mm	45 MHz to 1 GHz	0.0010	to 0.0015	0.0012	to 0.0037
	1 GHz to 12 GHz	0.0010	to 0.0021	0.0012	to 0.0046
	12 GHz to 26.5 GHz	0.0018	to 0.0032	0.0020	to 0.0063
2.92 mm	45 MHz to 1 GHz	0.0024	to 0.0031	0.0024	to 0.0042
	1 GHz to 26.5 GHz	0.0023	to 0.0044	0.0024	to 0.0070
	26.5 GHz to 40 GHz	0.0042	to 0.0047	0.0041	to 0.0075
2.4 mm	45 MHz to 1 GHz	0.0014	to 0.0023	0.0015	to 0.0039
	1 GHz to 26.5 GHz	0.0012	to 0.0027	0.0014	to 0.0059
	26.5 GHz to 40 GHz	0.0022	to 0.0033	0.0023	to 0.0087

VOLTAGE REFLECTION COEFFICIENT PHASE, 0° to ±180°				Location Code: Bideford
Type N systems				
VRC 0.0000 to 0.0004	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	180° 180° 180°		
VRC 0.0004 to 0.0005	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	96° to 180° 120° to 180° 150° to 180°		
VRC 0.0005 to 0.001	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	96° to 120° 120° to 180° 150° to 180°		
VRC 0.001 to 0.01	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	9.1° to 120° 11° to 180° 15° to 180°		
VRC 0.01 to 0.1	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	0.92° to 11° 1.1° to 18° 1.5° to 22°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
VOLTAGE REFLECTION COEFFICIENT PHASE, 0° to ±180° (continued)				
Type N systems (continued)				
VRC 0.1 to 1	10 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 18 GHz	0.13° to 1.1° 0.19° to 1.7° 0.29° to 2.1°		Bideford
3.5 mm systems				
VRC 0.0000 to 0.0004	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	170° to 180° 167° to 180° 180°		
VRC 0.0004 to 0.0005	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	63° to 180° 62° to 180° 110° to 180°		
VRC 0.0005 to 0.001	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	63° to 77° 62° to 120° 110° to 180°		
VRC 0.001 to 0.01	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	5.5° to 77° 5.3° to 110° 10° to 180°		
VRC 0.01 to 0.1	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	0.56° to 7.0° 0.56° to 11° 1.1° to 18°		
VRC 0.1 to 1	45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	0.11° to 0.71° 0.18° to 1.1° 0.38° to 1.8°		
2.92 mm systems				
VRC 0.000 to 0.0004	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	180° 180° 180°		
VRC 0.0004 to 0.0005	45 MHz to 1 GHz 1 GHz to 5 GHz 26.5 GHz to 40 GHz	139° to 180° 135° to 180° 180°		
VRC 0.0005 to 0.001	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	140° to 170° 140° to 180° 180°		
VRC 0.001 to 0.01	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	14° to 170° 13° to 180° 24° to 180°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
VOLTAGE REFLECTION COEFFICIENT PHASE, 0° to $\pm 180^\circ$ (continued) 2.92 mm systems (continued)				Bideford
VRC 0.01 to 0.1	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	1.4° to 17° 1.3° to 24° 2.4° to 25°		
VRC 0.1 to 1	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.21° to 1.7° 0.21° to 2.4° 0.46° to 2.5°		
2.4 mm systems				
VRC 0.000 to 0.0004	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	180° 180° 180°		
VRC 0.0004 to 0.0005	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	84° to 180° 76° to 180° 130° to 180°		
VRC 0.0005 to 0.001	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	84° to 120° 76° to 150° 130° to 170°		
VRC 0.001 to 0.01	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	7.8° to 120° 6.9° to 150° 13° to 170°		
VRC 0.01 to 0.1	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.77° to 12° 0.68° to 15° 1.4° to 17°		
VRC 0.1 to 1	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.16° to 1.2° 0.19° to 1.6° 0.75° to 2.1°		



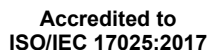
0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF ATTENUATION Tuned receiver method	0 dB to 30 dB 9 kHz to 100 kHz 100 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz 30 dB to 60 dB 9 kHz to 100 kHz 100 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz 60 dB to 70 dB 9 kHz to 100 kHz 100 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz 70 dB to 80 dB 9 kHz to 100 kHz 100 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz 80 dB to 90 dB 9 kHz to 100 kHz 100 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz	0.032 dB 0.032 dB 0.032 dB 0.051 dB 0.055 dB 0.087 dB 0.12 dB 0.13 dB 0.045 dB 0.045 dB 0.045 dB 0.072 dB 0.079 dB 0.12 dB 0.16 dB 0.18 dB 0.055 dB 0.055 dB 0.055 dB 0.088 dB 0.097 dB 0.14 dB 0.20 dB 0.22 dB 0.080 dB 0.056 dB 0.056 dB 0.088 dB 0.097 dB 0.15 dB 0.20 dB 0.22 dB 0.13 dB 0.067 dB 0.063 dB 0.093 dB 0.10 dB 0.15 dB 0.23 dB 0.24 dB	50 Ω systems only	Bideford



issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Bidetoro



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF ATTENUATION (continued) Power meter method (continued)	60 dB to 70 dB 9 kHz to 20 kHz 20 kHz to 1 MHz 1 MHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz 1 GHz to 5 GHz 5 GHz to 10 GHz 10 GHz to 15 GHz 15 GHz to 18 GHz	0.24 dB 0.23 dB 0.23 dB 0.12 dB 0.12 dB 0.12 dB 0.13 dB 0.14 dB 0.14 dB	50 Ω systems only	Bideford
FREQUENCY MODULATION	0 Hz to 5 kHz 5 kHz to 20 kHz 20 kHz to 100 kHz 100 kHz to 700 kHz	0.10 kHz 0.11 kHz 0.50 kHz 3.4 kHz	Using modulation meter. Carrier frequency range: 50 kHz to 1 GHz Modulation frequency range: 10 Hz to 200 kHz or 1/5 of carrier frequency (Distortion <0.5 %)	
AMPLITUDE MODULATION	0 %AM to 20 %AM 20 %AM to 50 %AM 50 %AM to 80 %AM 80 %AM to 95 %AM	0.16 %AM 0.32 %AM 0.53 %AM 1.1 %AM	Using modulation meter. Carrier frequency range: 50 kHz to 1 GHz Modulation frequency range: 30 Hz to 100 kHz or 1/5 of carrier frequency (Distortion <0.5 %)	
RF INTERMODULATION PRODUCTS	0 dB to -80 dB 10 kHz to 110 MHz 110 MHz to 18 GHz	0.94 dB 1.9 dB	Spectrum analyser method.	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code
ELECTROSTATIC VOLTAGE	0.1 kV to 30 kV	0.69 %	Field meters for measuring charged surfaces	Bldeford
HIGH IMPEDANCE CONTACT VOLTAGE	0.1 kV to 30 kV	0.61 %	Electrostatic voltmeter and other high resistance voltmeters for measuring charged surfaces	
ELECTROSTATIC DISCHARGE GENERATORS				
Air discharge voltage	0.5 kV to 30 kV	0.73 %	EN61000-4-2:2009 ISO10605:2008 and 2023 EN61340-3-1 MIL-STD-331C EIA/JES22-A114-B EIA/JES22-A115-A The measurement bandwidth is the lowest specified by the associated standard.	
Pulse transition time	500 ps to 50 ns	2.2 %		
Peak current	0.1 A to 150 A	3.7 %		
Decay current	0.1 A to 150 A	5.0 %		
BULK CURRENT INJECTION PROBES	Insertion loss <i>1 kHz to 500 MHz</i> 0 dB to 20 dB 20 dB to 70 dB 70 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.063 dB 0.13 dB 0.17 dB 0.41 dB 1.8 dB	Using vector network analyser.	
RF CURRENT PROBES	Insertion loss <i>10 Hz to 10 kHz</i> 0 dB to 90 dB 90 dB to 100 dB 100 dB to 110 dB 110 dB to 120 dB <i>1 kHz to 500 MHz</i> 0 dB to 20 dB 20 dB to 70 dB 70 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.075 dB 0.080 dB 0.12 dB 0.30 dB 0.084 dB 0.15 dB 0.20 dB 0.51 dB 1.8 dB	Using FFT analyser. Using vector network analyser.	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code	
BURST TRANSIENT GENERATOR CHARACTERISTICS					
Peak voltage	0.1 kV to 5 kV	2.6 %	For the calibration of Electrical Fast Transient generators and CDNs to 61000-4-4		
Rise time	3.5 ns to 50 s	0.91 %			
Pulse width	10 ns to 100 ns	0.91 %			
Repetition Frequency	1 kHz to 1 MHz	0.91 %			
Burst duration	100 μs to 100 ms	0.91 %			
Burst period	1 ms to 1 s	0.14 %			
SURGE PULSE CHARACTERISTICS					
Voltage	0.25 kV to 6.6 kV	2.1 %	For the calibration of surge generators to 61000-4-5 61000-4-9 60255-22-5		
Current	0.2 kA to 3.3 kA	2.8 %			
Impedance	1 Ω to 100 Ω	4.6 %			
Front/Rise Time	0.1 μs to 50 μs	0.91 %			
Pulse Duration	1 μs to 1 ms	0.91 %			
Phase	0° to 360°	0.5° to 3.3°			



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
LISN MEASUREMENT				Bideford
This section of the Schedule presents the CMCs for the measurement of complex impedance of a Line Impedance Stabilisation Network (LISN) using a vector network analysis system. Measurements are made as complex quantities. Reflection magnitude is expressed in terms of Impedance with Magnitude and Phase. Measurements are made in a 50 Ω coaxial system using an Agilent E5061B network analyser with appropriate test port leads in a 10 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.				
N Type 50 Ω system				
Impedance Magnitude	Magnitude 0 Ω to 150 Ω 1 kHz to 9 kHz 9 kHz to 150 kHz 150 kHz to 30 MHz 30 MHz to 300 MHz 300 MHz to 400 MHz	0.30 Ω 0.30 Ω 1.0 Ω 3.0 Ω 5.0 Ω		
Impedance Phase	Phase 0° to 180° 9 kHz to 108 MHz	1.0°		
Voltage Division	1 kHz to 400 MHz	0.25 dB		
Isolation	9 kHz to 108 MHz 0 dB to 60 dB 60 dB to 100 dB	1.0 dB 5.0 dB		
CDN MEASUREMENT				
This section of the Schedule presents the CMCs for the measurement of complex impedance of a CDN using a vector network analysis system. Measurements are made as complex quantities. Reflection magnitude is expressed in terms of Impedance with Magnitude and Phase. Measurements are made in a 50 Ω coaxial system using an Agilent E5061B network analyser with appropriate test port leads in a 10 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.				
Impedance Magnitude	Magnitude 50 Ω to 250 Ω 10 kHz to 150 kHz 150 kHz to 80 MHz 80 MHz to 230 MHz 230 MHz to 300 MHz	2.0 % 1.0 % 2.0 % 3.0 %		
Impedance Phase	Phase 0° to 180° 10 kHz to 300 MHz	5.0°		
Coupling Factor	10 kHz to 300 MHz 0 dB to 30 dB	0.39 dB		
Isolation	10 kHz to 300 MHz 0 dB to 60 dB 60 dB to 100 dB	1.0 dB 5.0 dB		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
ISN MEASUREMENT				Bideford
This section of the Schedule presents the CMCs for the measurement of characteristics of Impedance Stabilisation Networks (ISNs) to the requirements of CISPR 16-1-2, CISPR 22 and CISPR 32 using a vector network analysis system. Measurements are made in a 50 Ω coaxial system using an Agilent E5061B network analyser with appropriate test port leads, adaptors and transitions in a 1 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.				
Common Mode Impedance Magnitude Phase	150 kHz to 30 MHz 50 Ω to 250 Ω 0° to 180°	2.0 % 3.0°		
Voltage Division Factor	150 kHz to 30 MHz	0.20 dB		
Decoupling Attenuation	150 kHz to 30 MHz 0 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.30 dB 1.0 dB 2.7 dB		
Longitudinal Conversion Loss	150 kHz to 30 MHz 30 dB to 85 dB Cat. 3 Cat. 5 Cat. 6	0.25 dB 0.35 dB 0.65 dB		
Transmission Loss	100 kHz to 300 MHz 0 dB to 20 dB	0.10 dB		
Spectral Intensity	50 dB μ V/MHz to 150 dB μ V/MHz 9 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz	0.45 dB 0.42 dB 0.41 dB	For the calibration of Impulse Generators	
Impulse Measurement				
Detector Pulse Measurements	9 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz	0.57 dB 0.54 dB 0.56 dB	Absolute and relative CISPR detector response to pulses and response to varying repetition rates	
Detector response to narrowband interference	Band A to D	0.096 dB	Average and RMS CISPR detector response to any drifting narrow band interference	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code	
VOLTAGE DIPS, SHORT INTERRUPTIONS; VOLTAGE VARIATIONS GENERATORS					
Dip RMS Voltage	1 V to 500 V	0.58 % + 50 mV	For the calibration of Voltage Dips and Interrupts generators to EN61000-4-11	Bideford	
Voltage Variations	1 V to 500 V	1.5 %			
Transition rise and fall time	0.1 μs to 1 s	0.91 %			
Interruptions Overshoot Voltage	25 % to 100 %	2.8 %			
Phase Angle	0° to 360°	2.9°			
Dip Variations timing	10 μs to 30 s	0.91 %			
Peak Inrush Current	1 A to 1000 A	1.9 %			
DISCONTINUOUS INTERFERENCE ANALYSERS			Application of Pulses 1 to 12 as given in Table 14, CISPR 16-1-1 and in Table F1, CISPR 16-1-1.		
	Pulse Timings - Period and Width	0.16 %			
	Pulse Level Step Measurement	0.19 dB			
DAMPED OSCILLATORY GENERATORS					
Voltage	100 V to 6.6 kV <i>Frequency ≤1 MHz</i> <i>Frequency 1 MHz to 50 MHz</i>	2.1 % 2.9 %	For the calibration of Damped Oscillatory Wave Generators in accordance with EN 61000-4-10, EN 61000-4-12, EN 61000-4-18, ANSI C37.90.1		
Ring Wave Current	1 A to 400 A	2.8 %			
DOW Current	1 A to 150 A	3.6 %			
Impedance	5 Ω to 500 Ω	4.6 %			
Rise time	1 ns to 10 μs	0.91 %			
Frequency	10 kHz to 100 MHz	0.91 %			
Repetition Rate	100 μs to 1 s	0.91 %			
Burst Duration	1 ms to 5 s	0.91 %			
Phase	0° to 360°	3.3°			
Burst Period	1 ms to 1 s	0.14 %			
IMMUNITY TEST GENERATORS					
Voltage Ripple	0 V to 15 V	6.7 % + 5.0 mV	Calibration of immunity test generators designed to comply with EN 61000-4-16		
DC Voltage	50 mV to 500 V	0.073 %			
AC Voltage	50 mV to 10 V <i>10 Hz to 200 kHz</i>	0.20 %			
	10 V to 100 V <i>10 Hz to 100 kHz</i> <i>100 kHz to 200 kHz</i>	0.20 % 1.4 %			
	100 V to 500 V <i>10 Hz to 100 kHz</i> <i>100 kHz to 200 kHz</i>	0.25 % 1.4 %			
Impedance	25 Ω to 100 Ω <i>DC and 10 Hz to 200 kHz</i> <i>DC and 10 Hz to 100 kHz</i> <i>100 kHz to 200 kHz</i> <i>DC and 10 Hz to 100 kHz</i> <i>100 kHz to 200 kHz</i>	0.35 % 0.35 % 1.4 % 0.38 % 1.4 %	Supply voltage: 50 mV to 10 V 10 V to 100 V 10 V to 100 V 100 V to 500 V 100 V to 500 V		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
IMMUNITY TEST GENERATORS (continued)				Bideford
Transition Time	0.5 μ s to 10 μ s	0.93 %		
Frequency	10 Hz to 300 kHz	0.035 %		
Distortion (THD)	Fundamental 10 Hz to 15 kHz Fundamental 15 kHz to 200 kHz	1.2 % of value + 0.10% absolute 5.1 % of value + 0.10% absolute		
On/off synchronised switching	0° to 180°	0.86 % + 0.16°		
ANTENNA MEASUREMENTS				
Monopole Antenna	20 Hz to 30 MHz	1.4 dB/m	Equivalent capacitance method.	
Antenna Factor	30 MHz to 100 MHz	1.6 dB/m		
Antenna Factor and Apparent Gain			Best capability using the three antenna method or by comparison with similar antennas using the standard antenna method.	
Biconical Antennas	20 MHz to 1 GHz	1.5 dB (1.8 dB at 1 m)	Measurement distance 10 m, 3.0 m and 1.0 m.	
Broad Band Dipoles	300 MHz to 1 GHz	1.5 dB (1.8 dB at 1 m)		
Log Periodic	80 MHz to 18 GHz	1.5 dB (1.6 dB at 1 m)	Measurement distances 3.0 m and 1.0 m; calculated results for 10 m and for Free Space.	
Bilog and hybrid antennas	20 MHz to 18 GHz	1.5 dB (1.8 dB at 1 m)	Measurement distances 3.0 m and 1.0 m; calculated results for 10 m and for Free Space.	
Horn Antennas	200 MHz to 1 GHz 1 GHz to 18 GHz	1.5 dB 1.5 dB	Horn measurement at 3 m and 1.0 m.	
Voltage Reflection Coefficient	18 GHz to 26.5 GHz 30 MHz to 1 GHz 1 GHz to 18 GHz	1.5 dB 0.090 0.13		
E-FIELD EMITTERS				Bideford/Castelford
Noise sources, comparison noise emitters, comb generators and similar equipment.				
Conducted measurements	30 Hz to 40 GHz	2.7 dB		
Radiated measurements	30 MHz to 1 GHz 1 GHz to 18 GHz 18 GHz to 40 GHz 30 MHz to 1 GHz 1 GHz to 40 GHz	4.9 dB 5.3 dB 4.8 dB 6.1 dB 5.2 dB	Fully Anechoic Room, 3 m Fully Anechoic Room, 3 m Fully Anechoic Room, 3 m Semi-Anechoic Chamber Semi-Anechoic Chamber	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
DC RESISTANCE				Site
Generation	0 Ω to 11 Ω 11 Ω to 20 Ω 20 Ω to 50 Ω 50 Ω to 100 k Ω 0.1 M Ω to 1 M Ω 1 M Ω to 3.3 M Ω 3.3 M Ω to 10 M Ω 10 M Ω to 33 M Ω 33 M Ω to 110 M Ω 110 M Ω to 330 M Ω	0.0075 % + 1.3 m Ω 0.018 % 0.013 % 0.0080 % 0.0096 % 0.011 % 0.036 % 0.080 % 0.32 % 0.38 %	Using multi-function calibrator.	
Measurement	0 Ω to 50 Ω 50 Ω to 100 Ω 100 Ω to 300 Ω 0.3 k Ω to 1 k Ω 1 k Ω to 3 k Ω 3 k Ω to 10 k Ω 10 k Ω to 30 k Ω 30 k Ω to 100 k Ω 100 k Ω to 300 k Ω 0.3 M Ω to 1 M Ω 1 M Ω to 10 M Ω 10 M Ω to 100 M Ω	0.0082 % + 4.1 m Ω 0.016 % 0.018 % 0.011 % 0.018 % 0.011 % 0.018 % 0.011 % 0.018 % 0.012 % 0.030 % 0.90 %	Using digital multimeter; test current ≤ 1 mA.	
DC VOLTAGE				
Generation	0 mV to 330 mV 330 mV to 3.3 V 3.3 V to 33 V 33 V to 330 V 330 V to 1000 V	55 μ V/V + 2.5 μ V 45 μ V/V 45 μ V/V 49 μ V/V 41 μ V/V	Using multi-function calibrator.	
Measurement	0 mV to 100 mV 100 mV to 200 mV 200 mV to 500 mV 0.5 V to 1 V 1 V to 2 V 2 V to 5 V 5 V to 10 V 10 V to 20 V 20 V to 50 V 50 V to 100 V 100 V to 200 V 200 V to 500 V 500 V to 1000 V	44 μ V/V + 3.6 μ V 100 μ V/V 66 μ V/V 46 μ V/V 71 μ V/V 47 μ V/V 33 μ V/V 130 μ V/V 81 μ V/V 55 μ V/V 140 μ V/V 86 μ V/V 64 μ V/V	Using digital multimeter. Test current ≤ 1 mA.	



2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Site



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
DC CURRENT (continued)				Site
Generation and measurement	10 A to 100 A 100 A to 250 A 250 A to 1000 A	0.10 % 0.12 % 0.32 %	Using digital multimeter and current shunt. Generation limited to a maximum of 375 A.	
AC VOLTAGE				
Generation	2.5 mV to 7.07 V <i>0.1 Hz to 10 Hz</i>	0.15 % + 5.0 μ V	Using fast DC sampling techniques.	
	<i>10 Hz to 45 Hz</i> 0.33 V to 1 V 1 V to 3.3 V 3.3 V to 10 V 10 V to 33 V	0.14 % 0.11 % 0.14 % 0.11 %	Using multi-function calibrator.	
	<i>30 Hz to 45 Hz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 33 mV 33 mV to 100 mV 100 mV to 330 mV	1.0 % 0.52 % 0.36 % 0.27 % 0.19 %		
	<i>45 Hz to 10 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 33 mV 33 mV to 100 mV 100 mV to 330 mV 0.33 V to 1 V 1 V to 3.3 V 3.3 V to 10 V 10 V to 33 V	0.89 % 0.41 % 0.37 % 0.080 % 0.049 % 0.038 % 0.027 % 0.040 % 0.031 %		



0452

Accredited to
ISO/IEC 17025:2017

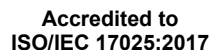
Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC VOLTAGE (continued) Generation (continued)	<i>45 Hz to 1 kHz</i> 33 V to 100 V 100 V to 330 V 330 V to 1000 V <i>1 kHz to 20 kHz</i> 33 V to 100 V 100 V to 330 V 300 V to 1000 V <i>10 kHz to 20 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 33 mV 33 mV to 100 mV 100 mV to 330 mV 0.33 V to 1 V 1 V to 3.3 V 3.3 V to 10 V 10 V to 33 V <i>20 kHz to 50 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 33 mV 33 mV to 100 mV 100 mV to 330 mV 0.33 V to 1 V 1 V to 3.3 V 3.3 V to 10 V 10 V to 33 V 33 V to 100 V 100 V to 330 V <i>50 kHz to 100 kHz</i> 2 mV to 5 mV 5 mV to 10 mV 10 mV to 33 mV 33 mV to 100 mV 100 mV to 330 mV 0.33 V to 1 V 1 V to 3.3 V 3.3 V to 10 V 10 V to 33 V 33 V to 100 V 100 V to 330 V	 0.048 % 0.038 % 0.051 % 0.13 % 0.084 % 0.24 % 1.0 % 0.47 % 0.28 % 0.11 % 0.083 % 0.065 % 0.056 % 0.11 % 0.070 % 1.5 % 0.65 % 0.33 % 0.19 % 0.13 % 0.15 % 0.10 % 0.23 % 0.15 % 0.11 % 0.097 % 1.5 % 0.87 % 0.50 % 0.54 % 0.27 % 0.53 % 0.26 % 0.53 % 0.27 % 0.34 % 0.22 %		Site



issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Site



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT Generation	<i>10 Hz to 20 Hz</i> 30 μ A to 50 μ A 50 μ A to 100 μ A 100 μ A to 200 μ A 200 μ A to 330 μ A 330 μ A to 1000 μ A 1 mA to 3.3 mA 3.3 mA to 10 mA 10 mA to 33 mA 33 mA to 100 mA 100 mA to 330 mA 0.33 A to 1 A <i>20 Hz to 45 Hz</i> 30 μ A to 50 μ A 50 μ A to 100 μ A 100 μ A to 200 μ A 200 μ A to 330 μ A 330 μ A to 1000 μ A 1 mA to 3.3 mA 3.3 mA to 10 mA 10 mA to 33 mA 33 mA to 100 mA 100 mA to 330 mA 0.33 A to 1 A <i>45 Hz to 1 kHz</i> 30 μ A to 50 μ A 50 μ A to 100 μ A 100 μ A to 200 μ A 200 μ A to 330 μ A 330 μ A to 1000 μ A 1 mA to 3.3 mA 3.3 mA to 10 mA 10 mA to 33 mA 33 mA to 100 mA 100 mA to 330 mA 0.33 A to 1 A <i>45 Hz to 100 Hz</i> 1 A to 3 A 3 A to 9 A 9 A to 11 A 11 A to 20 A	0.38 % 0.28 % 0.20 % 0.16 % 0.16 % 0.14 % 0.16 % 0.13 % 0.16 % 0.13 % 0.14 % 0.35 % 0.25 % 0.17 % 0.13 % 0.11 % 0.091 % 0.11 % 0.077 % 0.11 % 0.078 % 0.14 % 0.34 % 0.23 % 0.16 % 0.12 % 0.099 % 0.076 % 0.077 % 0.048 % 0.077 % 0.049 % 0.057 % 0.052 % 0.093 % 0.060 % 0.11 %	Using multi-function calibrator.	Site



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT (continued)				Site
Generation (continued)				
	<i>100 Hz to 1 kHz</i>			
	1 A to 3 A	0.42 %		
	3 A to 9 A	0.11 %		
	9 A to 11 A	0.081 %		
	11 A to 20 A	0.14 %		
	<i>1 kHz to 5 kHz</i>			
	30 μ A to 50 μ A	0.58 %		
	50 μ A to 100 μ A	0.43 %		
	100 μ A to 200 μ A	0.31 %		
	200 μ A to 330 μ A	0.25 %		
	330 μ A to 1000 μ A	0.17 %		
	1 mA to 3.3 mA	0.14 %		
	3.3 mA to 10 mA	0.099 %		
	10 mA to 33 mA	0.069 %		
	33 mA to 100 mA	0.18 %		
	100 mA to 330 mA	0.11 %		
	0.33 A to 1 A	0.41 %		
	1 A to 3 A	1.9 %		
	3 A to 9 A	0.41 %		
	9 A to 11 A	0.40 %		
	11 A to 20 A	2.0 %		
	<i>5 kHz to 10 kHz</i>			
	30 μ A to 50 μ A	0.98 %		
	50 μ A to 100 μ A	0.78 %		
	100 μ A to 200 μ A	0.62 %		
	200 μ A to 330 μ A	0.55 %		
	330 μ A to 1000 μ A	0.38 %		
	1 mA to 3.3 mA	0.34 %		
	3.3 mA to 10 mA	0.20 %		
	10 mA to 33 mA	0.15 %		
	33 mA to 100 mA	0.36 %		
	100 mA to 330 mA	0.21 %		
	0.33 A to 1 A	2.7 %		
Measurement	<i>10 Hz to 10 kHz</i>		Using digital multimeter.	
	10 μ A to 50 μ A	0.50 %		
	50 μ A to 100 μ A	0.19 %		
	100 μ A to 500 μ A	0.50 %		
	500 μ A to 1000 μ A	0.19 %		
	1 mA to 5 mA	0.50 %		
	5 mA to 10 mA	0.19 %		
	10 mA to 50 mA	0.50 %		
	50 mA to 100 mA	0.18 %		
	100 mA to 500 mA	0.50 %		
	0.5 A to 1 A	0.19 %		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC CURRENT (continued)				Site
Measurement (continued)	30 Hz to 5 kHz 1 A to 2 A 2 A to 8 A 8 A to 10 A	0.35 % 0.29 % 0.20 %		
	30 Hz to 5 kHz 100 mA to 1 A 1 A to 10 A 10 A to 20 A	0.37 % 0.18 % 0.36 %	Using digital multimeter and current shunt.	
CALIBRATION OF CURRENT CLAMPS			Using single or multi=turn coils.	
DC Current	0 A to 20 A 0 A to 1000 A 1 kA to 5 kA	0.25 % + 10 μ A 0.34 % + 10 μ A 0.36 %	Single turn 10 or 50 turns 50 turns	
AC Current	100 μ A to 1 A 10 Hz to 5 kHz	0.26 %	Single turn	
	1 A to 20 A 45 Hz to 5 kHz	0.26 %	Single turn	
	3.2 A to 1000 A 45 Hz to 100 Hz 100 Hz to 440 Hz	0.36 % 0.84 %	10 or 50 turns 10 or 50 turns	
PHASE ANGLE			Using calibrated phase angle source, voltage to voltage or voltage to current, with the following restraints:	
Generation	0° to 360° 10 Hz to 65 Hz 65 Hz to 500 Hz 500 Hz to 1 kHz 1 kHz to 5 kHz	0.12° 0.70° 1.6° 4.7°	Ch1: 30 Hz to 45 Hz, 10 mV to 330 mV. 10 Hz to 45 Hz, 330 mV to 33 V. 45 Hz to 5 kHz, 10 mV to 300 V. Ch2: 30 Hz to 45 Hz, 10 mV to 330 mV. 10 Hz to 5 kHz, 330 mV to 5 V. 10 Hz to 45 Hz, 10 mA to 1 A. 45 Hz to 5 kHz, 10 mA to 20 A. Uncertainties will increase when calibrating zero- crossing detector phase meters.	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range		Expanded Measurement Uncertainty ($k = 2$)		Remarks	Location code
DC AND AC POWER					Using phantom load techniques.	
DC Power	Voltage range 10 mV to 1 kV Current range 20 μ A to 375 A Power range up to 375 kW		The RSS summation of the voltage and current uncertainties as stated above.			
AC Power (10 Hz to 30 Hz)	Voltage range 330 mV to 33 V Current range 10 mA to 1 A Power range up to 33 W		The RSS summation of the voltage, current and phase uncertainties as stated above.			
AC Power (30 Hz to 45 Hz)	Voltage range 10 mV to 33 V Current range 10 mA to 1 A Power range up to 33 W					
AC Power (45 Hz to 5 kHz)	Voltage range 10 mV to 300 V Current range 10 mA to 20 A Power range up to 6 kW					
Example Power CMCs						
DC Power	Current		10 mV to 330 mV (%)	330 mV to 1000V (%)		
	20 μ A		0.20	0.20		
	100 μ A		0.090	0.085		
	1 mA		0.034	0.017		
	10 mA		0.032	0.012		
	100 mA		0.032	0.011		
	1 A		0.042	0.029		
	20 A		0.079	0.073		
	100 A		0.12	0.12		
	375 A		0.28	0.28		
AC Power	Voltage	Phase	10 Hz to 30 Hz			
			10 mA to 1 A			
			Power			
			%	mW/VA		
	330 mV to 33 V	0°	0.21	2.1		
		5°	0.21	2.1		
		45°	0.30	2.1		
		90°		2.1		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
Example Power CMCs (continued)				Site

	Phase (°)	30 Hz to 45 Hz						
		10 mA to 33 mA Power		33 mA to 330 mA Power		330 mA to 1 A Power		
		%	mW/VA	%	mW/VA	%	mW/VA	
10 mV to 33 mV	0	0.37	3.7	0.38	3.8	0.39	3.9	
	5	0.37	3.7	0.38	3.8	0.39	3.9	
	45	0.42	3.0	0.43	3.0	0.44	3.1	
	90		2.1		2.1		2.1	
33 mV to 330 mV	0	0.28	2.8	0.29	2.9	0.30	3.0	
	5	0.28	2.8	0.29	2.9	0.30	3.0	
	45	0.35	2.5	0.36	2.5	0.37	2.6	
	90		2.1		2.1		2.1	
330 mV to 33 V	0	0.20	2.0	0.18	1.8	0.20	2.0	
	5	0.20	2.0	0.18	1.8	0.20	2.0	
	45	0.29	2.0	0.28	1.9	0.29	2.0	
	90		2.1		2.1		2.1	

	Phase (°)	45 Hz to 65 Hz									
		10 mA to 33 mA Power		33 mA to 330 mA Power		330 mA to 1 A Power		1 A to 11 A Power		11 A to 20 A Power	
		%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA
10 mV to 33 mV	0	0.37	3.7	0.38	3.8	0.37	3.7	0.56	5.6	0.40	4.0
	5	0.37	3.7	0.38	3.8	0.37	3.7	0.56	5.6	0.40	3.9
	45	0.43	3.0	0.43	3.1	0.43	3.0	0.60	4.2	0.45	3.2
	90		2.1		2.1		2.1		2.1		2.1
33 mV to 330 mV	0	0.093	0.93	0.11	1.1	0.098	0.98	0.43	4.3	0.16	1.6
	5	0.095	0.95	0.11	1.1	0.10	1.0	0.43	4.3	0.16	1.6
	45	0.23	1.6	0.24	1.7	0.23	1.6	0.48	3.4	0.26	1.9
	90		2.1		2.1		2.1		2.1		2.1
330 mV to 33 V	0	0.062	0.62	0.087	0.87	0.070	0.70	0.42	4.2	0.15	1.5
	5	0.065	0.65	0.089	0.88	0.072	0.72	0.42	4.2	0.15	1.5
	45	0.22	1.5	0.23	1.6	0.22	1.6	0.47	3.3	0.26	1.8
	90		2.1		2.1		2.1		2.1		2.1
33 V to 300 V	0	0.068	0.68	0.091	0.91	0.075	0.75	0.42	4.2	0.15	1.5
	5	0.070	0.70	0.093	0.92	0.077	0.80	0.42	4.2	0.15	1.5
	45	0.22	1.6	0.23	1.6	0.22	1.6	0.47	3.3	0.26	1.8
	90		2.1		2.1		2.1		2.1		2.1



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
Example Power CMCs (continued)				Site

	Phase (°)	65 Hz to 500 Hz									
		10 mA to 33 mA Power		33 mA to 330 mA Power		330 mA to 1 A Power		1 A to 11 A Power		11 A to 20 A Power	
		%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA
10 mV to 33 mV	0	0.37	3.7	0.38	3.8	0.37	3.7	0.56	5.6	0.40	4.0
	5	0.39	3.9	0.39	3.9	0.39	3.9	0.57	5.7	0.41	4.1
	45	1.3	9.1	1.3	9.1	1.3	9.1	1.4	9.6	1.3	9.1
	90		12		12		12		12		12
33 mV to 330 mV	0	0.094	0.94	0.11	1.1	0.099	0.99	0.43	4.3	0.16	1.6
	5	0.15	1.5	0.16	1.6	0.15	1.5	0.44	4.4	0.20	2.0
	45	1.2	8.7	1.2	8.7	1.2	8.7	1.3	9.2	1.2	8.8
	90		12		12		12		12		12
330 mV to 33 V	0	0.063	0.63	0.087	0.87	0.070	0.70	0.42	4.2	0.15	1.5
	5	0.13	1.3	0.14	1.4	0.13	1.3	0.44	4.4	0.19	1.8
	45	1.2	8.7	1.2	8.7	1.2	8.7	1.3	9.2	1.2	8.8
	90		12		12		12		12		12
33 V to 300 V	0	0.068	0.68	0.091	0.91	0.075	0.75	0.42	4.2	0.15	1.5
	5	0.13	1.3	0.15	1.5	0.14	1.4	0.44	4.4	0.19	1.9
	45	1.2	8.7	1.2	8.7	1.2	8.7	1.3	9.2	1.2	8.8
	90		12		12		12		12		12



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
Example Power CMCs (continued)				Site

	Phase (°)	500 Hz to 1 kHz									
		10 mA to 33 mA Power		33 mA to 330 mA Power		330 mA to 1 A Power		1 A to 11 A Power		11 A to 20 A Power	
		%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA
10 mV to 33 mV	0	0.38	3.8	0.38	3.8	0.38	3.8	0.56	5.6	0.40	4.0
	5	0.47	4.7	0.47	4.7	0.47	4.7	0.63	6.2	0.49	4.8
	45	2.9	20	2.9	20	2.9	20	2.9	20	2.9	20
	90		28		28		28		28		28
33 mV to 330 mV	0	0.10	1.0	0.12	1.2	0.11	1.1	0.43	4.3	0.17	1.7
	5	0.30	3.0	0.30	3.0	0.30	3.0	0.51	5.1	0.33	3.2
	45	2.8	20	2.8	20	2.8	20	2.9	20	2.8	20
	90		28		28		28		28		28
330 mV to 33 V	0	0.074	0.74	0.095	1.0	0.080	0.80	0.42	4.2	0.15	1.5
	5	0.29	2.9	0.30	3.0	0.29	2.9	0.51	5.1	0.32	3.2
	45	2.8	20	2.8	20	2.8	20	2.9	20	2.8	20
	90		28		28		28		28		28
33 V to 300 V	0	0.078	0.78	0.099	0.99	0.084	0.84	0.42	4.2	0.15	1.5
	5	0.29	2.9	0.30	3.0	0.29	2.9	0.51	5.1	0.32	3.2
	45	2.8	20	2.8	20	2.8	20	2.9	20	2.8	20
	90		28		28		28		28		28



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
Example Power CMCs (continued)				Site

	Phase (°)	1 kHz to 5 kHz									
		10 mA to 33 mA		33 mA to 330 mA		330 mA to 1 A		1 A to 11 A		11 A to 20 A	
		Power		Power		Power		Power		Power	
		%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA	%	mW/VA
10 mV to 33 mV	0	0.50	5.0	0.53	5.3	0.65	6.5	2.0	20	2.1	21
	5	1.1	11	1.1	11	1.2	12	2.2	22	2.3	23
	45	8.5	60	8.5	60	8.5	60	8.7	62	8.8	62
	90		82		82		82		82		82
33 mV to 330 mV	0	0.35	3.5	0.39	3.9	0.54	5.4	1.9	19	2.0	20
	5	1.1	11	1.1	11	1.1	11	2.2	22	2.3	23
	45	8.5	60	8.5	60	8.5	60	8.7	62	8.8	62
	90		82		82		82		82		82
330 mV to 33 V	0	0.35	3.5	0.38	3.8	0.53	5.3	1.9	19	2.0	20
	5	1.1	11	1.1	11	1.1	11	2.2	22	2.3	23
	45	8.5	60	8.5	60	8.5	60	8.7	62	8.8	62
	90		82		82		82		82		82
33 V to 300 V	0	0.37	3.7	0.40	4.0	0.55	5.5	1.9	19	2.0	20
	5	1.1	11	1.1	11	1.1	11	2.2	22	2.3	23
	45	8.5	60	8.5	60	8.5	60	8.7	62	8.8	62
	90		82		82		82		82		82

FREQUENCY AND TIME INTERVAL			Using GPS disciplined oscillator and counter timer.	
Frequency	10 MHz 1 Hz to 1 GHz 1 GHz to 40 GHz	1.0 in 10^{10} 12 in 10^9 1.3 in 10^9	May be expressed as average periodic time (1/f) for repetitive signals.	
Time Interval	1 ns to 10 ns 10 ns to 100 ns 100 ns to 1 μ s 1 μ s to 100 μ s 100 μ s to 1 ms 1 ms to 10 ms 10 ms to 100 ms 100 ms to 10^5 s	1.2 % 0.17 % 170 μ s/s 19 μ s/s 0.21 μ s/s 22 in 10^9 14 in 10^9 14 in 10^9	For signals with transition times ≤ 100 ns. For repetitive or single event 100 μ s to 10^5 s, where the start to stop signal slew variation are not equal but differ by less than 50 %, an additional contribution of 400 ps will to be included.	Site



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
CAPACITANCE Measurement and generation	<i>At 100 Hz</i> 100 pF to 300 pF 300 pF to 800 pF 800 pF to 1 nF 1 nF to 1 μ F 1 μ F to 100 μ F	0.62 % 0.51 % 0.26 % 0.15 % 0.16 %	Using LCR meter and transfer standard capacitors.	Site
	<i>At 1 kHz</i> 10 pF to 30 pF 30 pF to 80 pF 80 pF to 100 pF 100 pF to 1 μ F 1 μ F to 100 μ F	0.70 % 0.57 % 0.26 % 0.15 % 0.16 %		
	<i>At 10 kHz</i> 10 pF to 30 pF 30 pF to 80 pF 80 pF to 100 pF 100 pF to 1 μ F	0.36 % 0.31 % 0.19 % 0.15 %		
	INDUCTANCE Measurement and generation			
	<i>At 100 Hz:</i> 100 μ H to 250 μ H 250 μ H to 600 μ H 600 μ H to 100 mH 100 mH to 1 H	0.62 % 0.32 % 0.24 % 0.30 %		
	<i>At 1 kHz:</i> 10 μ H to 25 μ H 25 μ H to 60 μ H 60 μ H to 150 μ H 150 μ H to 1 H	0.60 % 0.29 % 0.19 % 0.16 %		
	<i>At 10 kHz:</i> 10 μ H to 20 μ H 20 μ H to 10 mH 10 mH to 100 mH	0.20 % 0.16 % 0.18 %		
	AC HARMONICS AND DISTORTION			
	Harmonic distortion THD_R and THD_F			
	Generation of a single significant harmonic			
	Fundamental Frequency 30 Hz to 20 kHz THD_R 0.003 % to 100 % THD_F 0.003 % to 1000 %			
	Harmonic frequency: 30 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.55 % to 5.7 % 0.74 % to 5.7 % 1.5 % to 6.0 %		
			The fundamental voltage must lie in the range 30 mV to 8 V and the harmonic voltage in the range 3 μ V to 3 V.	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
AC HARMONICS AND DISTORTION (continued)				
Generation and measurement of multiple harmonics	Fundamental Frequency 30 Hz to 150 kHz THD_R 0.0003 % to 100 % THD_F 0.0003 % to 1000 %		Fundamental Voltage 3 mV to 300 V (frequency dependant). Harmonic Voltage 3 μ V to 300 V (frequency dependant). Generation limits: Fundamental level 3mV to 300 V Harmonic levels 30 μ V to 300 V, -60 dB to 20 dB. Fundamental Frequency 30 Hz to 20 kHz Harmonic Frequency 30 Hz to 100 kHz	
RF VOLTAGE	Harmonic frequency: 30 Hz to 90 kHz 30 Hz to 1.5 MHz 200 μ V to 1 mV 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 1 mV to 10 mV 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 10 mV to 1 V 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz 1 V to 10 V 9 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 1.5 GHz	0.41 % to 2.7 % 0.66 % to 10 % 1.1 % 1.0 % 1.0 % 1.3 % 2.1 % 0.96 % 0.96 % 0.96 % 1.3 % 2.1 % 0.80 % 0.80 % 0.80 % 1.2 % 2.0 % 0.74 % 0.99 % 0.99 % 1.7 % 2.8 %	Narrow band configuration Wide band configuration Measurement and generation of RF Voltage by comparison with RF power meter.	Site



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code		
RF POWER				Site		
The CMCs below are for the measurement of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the measurement of sources, such as signal generators and synthesisers. Type N coaxial systems In addition to those listed below, there is also a capability at 1 mW, 50 MHz, with a CMC of 0.87 %.						
Frequency range	-60 dBm to -50 dBm	-50 dBm to -40 dBm	-40 dBm to -20 dBm			
9 kHz to 10 MHz	1.6 %	1.5 %	1.2 %			
Frequency range	-62 dBm to -55 dBm	-55 dBm to -20 dBm	-20 dBm to +20 dBm		+20 dBm to +44 dBm	+44 dBm to +55 dBm
9 kHz to 10 MHz			1.4 %		2.2 %	2.6 %
10 MHz to 50 MHz	1.5 %	1.4 %	1.4 %		2.2 %	2.6 %
50 MHz to 1 GHz	1.6 %	1.5 %	1.5 %		2.1 %	2.2 %
1 GHz to 5 GHz	1.7 %	1.6 %	1.5 %		2.0 %	2.6 %
5 GHz to 10 GHz	2.1 %	2.0 %	1.5 %		2.1 %	3.2 %
10 GHz to 12.5 GHz	2.2 %	2.1 %	1.7 %		2.7 %	5.1 %
12.5 GHz to 15 GHz	2.2 %	2.1 %	1.7 %		2.8 %	
15 GHz to 18 GHz	2.4 %	2.4 %	1.8 %	2.8 %		
3.5 mm coaxial systems In addition to those listed below, there is also a capability at 1 mW, 50 MHz, with a CMC of 0.90 %						
Frequency range	-62 dBm to -55 dBm	-55 dBm to -20 dBm	-20 dBm to +20 dBm			
50 MHz to 1 GHz	1.7 %	1.6 %	1.5 %			
1 GHz to 5 GHz	1.7 %	1.6 %	1.6 %			
5 GHz to 10 GHz	1.8 %	1.7 %	1.6 %			
10 GHz to 15 GHz	2.1 %	2.0 %	1.9 %			
15 GHz to 20 GHz	2.6 %	2.6 %	2.4 %			
20 GHz to 26.5 GHz	3.4 %	3.4 %	2.9 %			
2.92 mm coaxial systems In addition to those listed below, there is also a capability at 1 mW, 50 MHz, with a CMC of 0.99 %						
Frequency range	-62 dBm to -55 dBm	-55 dBm to -20 dBm	-20 dBm to +20 dBm			
50 MHz to 1 GHz	1.8 %	1.8 %	1.6 %			
1 GHz to 5 GHz	1.9 %	1.8 %	1.7 %			
5 GHz to 10 GHz	2.0 %	2.0 %	1.9 %			
10 GHz to 15 GHz	2.2 %	2.1 %	2.0 %			
15 GHz to 20 GHz	2.5 %	2.4 %	2.5 %			
20 GHz to 25 GHz	2.6 %	2.6 %	2.7 %			
25 GHz to 30 GHz	3.1 %	3.1 %	3.1 %			
30 GHz to 35 GHz	3.8 %	3.7 %	3.5 %			
35 GHz to 40 GHz	4.9 %	4.9 %	3.5 %			



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF POWER (continued)				Site
The CMCs below are for the measurement of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the measurement of sources, such as signal generators and synthesisers.				
2.4 mm coaxial systems				
Frequency range	-62 dBm to -55 dBm	-55 dBm to -20 dBm	-20 dBm to +20 dBm	
50 MHz to 1 GHz	1.8 %	1.7 %	1.5 %	
1 GHz to 5 GHz	1.9 %	1.8 %	1.6 %	
5 GHz to 10 GHz	2.0 %	1.9 %	1.7 %	
10 GHz to 15 GHz	2.1 %	2.0 %	1.9 %	
15 GHz to 20 GHz	2.4 %	2.4 %	2.3 %	
20 GHz to 25 GHz	2.7 %	2.6 %	2.5 %	
25 GHz to 30 GHz	3.0 %	2.9 %	2.9 %	
30 GHz to 35 GHz	3.2 %	3.2 %	3.1 %	
35 GHz to 40 GHz	3.8 %	3.8 %	3.5 %	
Specific value	1 mW, 50 MHz Type N coaxial systems 3.5 mm coaxial systems 2.92 mm coaxial systems 2.4 mm coaxial systems	0.87 % 0.90 % 0.99 % 0.90 %	For the measurement of sources, including the calibrator output of RF power meters.	
The CMCs below are for the generation of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the calibration of receivers, spectrum analysers and similar items.				
Type N coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +14 dBm	
9 kHz to 10 MHz	2.2 %	1.9 %	1.4 %	
10 MHz to 50 MHz	2.2 %	1.9 %	1.4 %	
50 MHz to 1 GHz	1.8 %	1.7 %	1.5 %	
1 GHz to 5 GHz	1.9 %	1.7 %	1.5 %	
5 GHz to 10 GHz	2.1 %	1.8 %	1.5 %	
10 GHz to 15 GHz	2.3 %	2.0 %	1.7 %	
15 GHz to 18 GHz	2.7 %	2.1 %	1.7 %	
Frequency range	+14 dBm to +47 dBm	+47 dBm to +53 dBm		
9 kHz to 10 MHz	2.4 %	4.9 %		
10 MHz to 50 MHz	2.3 %	4.9 %		
50 MHz to 1 GHz	2.2 %	4.8 %		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF POWER (continued)				
The CMCs below are for the generation of RF Power in 50 Ω coaxial systems expressed in terms of % of the linearly expressed value for the stated frequency and power ranges. The capabilities are for the calibration of receivers, spectrum analysers and similar items.				
3.5 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +5 dBm	+5 dBm to +14 dBm
50 MHz to 1 GHz	1.9 %	1.7 %	1.5 %	1.5 %
1 GHz to 5 GHz	1.9 %	1.7 %	1.6 %	1.6 %
5 GHz to 10 GHz	2.1 %	1.9 %	1.7 %	1.7 %
10 GHz to 15 GHz	2.6 %	2.4 %	2.1 %	2.1 %
15 GHz to 20 GHz	3.1 %	2.9 %	2.5 %	2.5 %
20 GHz to 26.5 GHz	3.9 %	3.6 %	2.9 %	
2.92 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +5 dBm	+5 dBm to +14 dBm
50 MHz to 1 GHz	2.0 %	1.8 %	1.6 %	1.6 %
1 GHz to 5 GHz	2.0 %	1.8 %	1.7 %	1.7 %
5 GHz to 10 GHz	2.4 %	2.2 %	2.0 %	2.0 %
10 GHz to 15 GHz	2.6 %	2.3 %	2.1 %	2.1 %
15 GHz to 20 GHz	3.2 %	3.0 %	2.9 %	2.9 %
20 GHz to 25 GHz	3.5 %	3.2 %	3.1 %	
25 GHz to 30 GHz	4.1 %	3.8 %	3.7 %	
30 GHz to 35 GHz	4.8 %	4.5 %	4.1 %	
35 GHz to 40 GHz	5.2 %	4.7 %	4.3 %	
2.4 mm coaxial systems				
Frequency range	-70 dBm to -50 dBm	-50 dBm to -20 dBm	-20 dBm to +5 dBm	+5 dBm to +14 dBm
50 MHz to 1 GHz	1.9 %	1.7 %	1.5 %	1.5 %
1 GHz to 5 GHz	1.9 %	1.8 %	1.6 %	1.6 %
5 GHz to 10 GHz	2.2 %	2.0 %	1.7 %	1.7 %
10 GHz to 15 GHz	2.4 %	2.2 %	1.9 %	1.9 %
15 GHz to 20 GHz	3.0 %	2.7 %	2.5 %	2.5 %
20 GHz to 25 GHz	3.5 %	3.1 %	3.1 %	
25 GHz to 30 GHz	4.0 %	3.7 %	3.6 %	
30 GHz to 35 GHz	4.4 %	4.0 %	3.7 %	
35 GHz to 40 GHz	5.3 %	4.9 %	4.7 %	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)		Remarks	Location code
RF CALIBRATION FACTOR	Type N 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm	For calibration of RF power sensors by comparison with standard sensors. Values of calibration factor between 30 % and 140 % may be reported; these represent the percentage of the reported calibration factor	Site
	9 kHz to 10 MHz	0.73 %	1.4 %		
	10 MHz to 50 MHz	0.73 %	1.4 %		
	50 MHz to 1 GHz	0.82 %	1.1 %		
	1 GHz to 5 GHz	0.85 %	1.1 %		
	5 GHz to 10 GHz	0.93 %	1.6 %		
	10 GHz to 15 GHz	1.1 %	1.8 %		
	15 GHz to 18 GHz	1.3 %	1.9 %		
	3.5 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.86%	1.2 %		
	1 GHz to 5 GHz	0.93 %	1.2 %		
	5 GHz to 10 GHz	1.1 %	1.4 %		
	10 GHz to 15 GHz	1.6 %	2.0 %		
	15 GHz to 20 GHz	2.2 %	2.6 %		
	20 GHz to 26.5 GHz	3.1 %	3.9 %		
	2.92 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.92 %	1.2 %		
	1 GHz to 5 GHz	1.1 %	1.3 %		
	5 GHz to 10 GHz	1.4 %	1.7 %		
	10 GHz to 15 GHz	1.7 %	2.0 %		
	15 GHz to 20 GHz	2.5 %	2.7 %		
	20 GHz to 25 GHz	2.9 %	2.9 %		
	25 GHz to 30 GHz	3.4 %	3.6 %		
	30 GHz to 35 GHz	4.1 %	4.6 %		
	35 GHz to 40 GHz	4.1 %	5.6 %		
	2.4 mm 50 Ω coaxial systems	Nominal level 0 dBm	Nominal level -30 dBm		
	50 MHz to 1 GHz	0.90 %	1.2 %		
	1 GHz to 5 GHz	1.1%	1.2 %		
	5 GHz to 10 GHz	1.2 %	1.5 %		
	10 GHz to 15 GHz	1.4 %	1.8 %		
	15 GHz to 20 GHz	2.0 %	2.4 %		
	20 GHz to 25 GHz	2.5 %	2.9 %		
	25 GHz to 30 GHz	3.2 %	3.5 %		
	30 GHz to 35 GHz	3.4 %	3.8 %		
	35 GHz to 40 GHz	3.9 %	4.4 %		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
LF VECTOR NETWORK ANALYSIS				
This section of the Schedule presents the CMCs for a vector network analysis system. Measurements are made as complex quantities. Transmission magnitude capabilities are expressed in dB terms and reflection magnitude is expressed in terms of voltage reflection coefficient (VRC). These may also be reported in terms of voltage standing wave ratio (VSWR), return loss (dB) or Impedance magnitude and phase. Measurements are made in a Type N 50 Ω coaxial system using an E5061B network analyser with appropriate test port leads in a 10 Hz bandwidth (1 Hz bandwidth for transmission measurements greater than 70 dB).				
Reflection magnitude	VRC 0 to 0.1 1 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 500 MHz	0.0017 to 0.0019 0.0017 to 0.0019 0.0017 to 0.0022		Site
	VRC 0.1 to 0.5 1 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 500 MHz	0.0017 to 0.0030 0.0017 to 0.0030 0.0017 to 0.0032		
	VRC 0.5 to 1 1 kHz to 1 MHz 1 MHz to 100 MHz 100 MHz to 500 MHz	0.0021 to 0.0048 0.0021 to 0.0048 0.0022 to 0.0052		
Reflection phase	VRC 0 to 0.004 1 kHz to 500 MHz	180°		
	VRC 0.004 to 0.001 1 kHz to 500 MHz	100° to 180°		
	VRC 0.001 to 0.01 1 kHz to 500 MHz	20° to 120°		
	VRC 0.01 to 1 1 kHz to 500 MHz	0.12° to 23°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	Location code
LF VECTOR NETWORK ANALYSIS (continued)				
Transmission magnitude	Attenuation 0 dB to 20 dB <i>1 kHz to 500 MHz</i>	0.0030 dB to 0.043 dB		Site
	20 dB to 70 dB <i>1 kHz to 500 MHz</i>	0.052 dB to 0.11 dB		
	70 dB to 80 dB <i>1 kHz to 500 MHz</i>	0.10 dB to 0.16 dB		
	80 dB to 90 dB <i>1 kHz to 500 MHz</i>	0.14 dB to 0.40 dB		
	90 dB to 100 dB <i>1 kHz to 500 MHz</i>	0.33 dB to 1.8 dB		
Transmission phase	0° to ± 180°			
	Attenuation 0 dB to 20 dB <i>1 kHz to 500 MHz</i>	0.0050° to 0.81°		
	Attenuation 20 dB to 70 dB <i>1 kHz to 500 MHz</i>	0.77° to 9.5°		
	Attenuation 70 dB to 80 dB <i>1 kHz to 500 MHz</i>	9.5° to 12°		
	Attenuation 80 dB to 90 dB <i>1 kHz to 500 MHz</i>	12° to 14°		
	Attenuation 90 dB to 100 dB <i>1 kHz to 500 MHz</i>	14° to 17°		
MF VECTOR NETWORK ANALYSIS				
This section of the Schedule presents the CMCs for a vector network analysis system. Measurements are made as complex quantities. Transmission magnitude capabilities are expressed in dB terms and Reflection magnitude is expressed in terms of voltage reflection coefficient (VRC). These may also be reported in terms of voltage standing wave ratio (VSWR), return loss (dB) or Impedance magnitude and phase. Measurements are made in a 50 Ω coaxial system using an E5080B network analyser with appropriate test port leads in a 10 Hz bandwidth and 1 Hz bandwidth for transmission measurements greater than 70 dB.				
N Type 50 Ω system				
Reflection magnitude	VRC 0.0 to 0.1			
	<i>9 kHz to 1 MHz</i> <i>1 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 10 GHz</i> <i>10 GHz to 18 GHz</i>	0.0017 to 0.0019 0.0016 to 0.0019 0.0016 to 0.0024 0.0021 to 0.0034 0.0027 to 0.0041		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
MF Vector Network Analysis (continued)				Site
Reflection Magnitude (continued)	VRC 0.1 to 0.5			
	9 kHz to 1 MHz	0.0017 to 0.0024		
	1 MHz to 100 MHz	0.0016 to 0.0024		
	100 MHz to 1 GHz	0.0016 to 0.0028		
	1 GHz to 10 GHz	0.0021 to 0.0036		
	10 GHz to 18 GHz	0.0027 to 0.0040		
	VRC 0.5 to 1.0			
	9 kHz to 1 MHz	0.0021 to 0.0035		
	1 MHz to 100 MHz	0.0021 to 0.0036		
	100 MHz to 1 GHz	0.0022 to 0.0043		
	1 GHz to 10 GHz	0.0027 to 0.0058		
	10 GHz to 18 GHz	0.0032 to 0.0059		
Reflection phase	VRC 0 to 0.0004			Site
	9 kHz to 1 MHz	180°		
	1 MHz to 100 MHz	180°		
	100 MHz to 1 GHz	180°		
	1 GHz to 10 GHz	180°		
	10 GHz to 18 GHz	180°		
	VRC 0.0004 to 0.001			
	9 kHz to 1 MHz	100° to 180°		
	1 MHz to 100 MHz	98° to 180°		
	100 MHz to 1 GHz	98° to 180°		
	1 GHz to 10 GHz	130° to 180°		
	10 GHz to 18 GHz	160° to 180°		
	VRC 0.001 to 0.01			Site
	9 kHz to 1 MHz	19° to 100°		
	1 MHz to 100 MHz	19° to 100°		
	100MHz to 1 GHz	19° to 130°		
	1 GHz to 10GHz	25° to 180°		
	10 GHz to 18GHz	31° to 180°		
	VRC 0.01 to 1			
	9 kHz to 1 MHz	0.12° to 20°		
	1 MHz to 100 MHz	0.12° to 19°		
	100 MHz to 1 GHz	0.18° to 25°		
	1 GHz to 10 GHz	0.19° to 37°		
	10 GHz to 18 GHz	0.31° to 45°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
MF Vector Network Analysis (continued)				
Transmission Magnitude	Attenuation 0 dB to 20 dB 9 kHz to 18 GHz	0.029 dB to 0.031 dB		
	Attenuation 20 dB to 40 dB 9 kHz to 18 GHz	0.029 dB to 0.034 dB		
	Attenuation 40 dB to 50 dB 9 kHz to 18 GHz	0.033 dB to 0.042 dB		
	Attenuation 50 dB to 60 dB 9 kHz to 18 GHz	0.040 dB to 0.098 dB		
	Attenuation 60 dB to 70 dB 9 kHz to 18 GHz	0.092 dB to 0.13 dB		
	Attenuation 70 dB to 80 dB 9 kHz to 1 MHz 1 MHz to 18 GHz	0.13 dB to 0.36 dB 0.13 dB to 0.19 dB		
	Attenuation 80 dB to 90 dB 9 kHz to 1 MHz 1 MHz to 18 GHz	0.17 dB to 1.0 dB 0.17 dB to 0.31 dB		
	Attenuation 90 dB to 100 dB 9 kHz to 1 MHz 1 MHz to 18 GHz	0.24 dB to 3.2 dB 0.23 dB to 0.76 dB		
Transmission phase	0° to ± 180°			
	Attenuation 0 dB to 20 dB			
	9 kHz to 1 MHz	0.21° to 0.27°		
	1 MHz to 100 MHz	0.21° to 0.25°		
	100 MHz to 1 GHz	0.21° to 0.26°		
	1 GHz to 10 GHz	0.22° to 0.43°		
	10 GHz to 18 GHz	0.34° to 0.72°		
	Attenuation 20 dB to 40 dB			
	9 kHz to 1 MHz	0.21° to 0.27°		
	1 MHz to 100 MHz	0.21° to 0.25°		
	100 MHz to 1 GHz	0.21° to 0.26°		
	1 GHz to 10 GHz	0.22° to 0.43°		
	10 GHz to 18 GHz	0.41° to 0.72°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
MF Vector Network Analysis (continued)				
Transmission phase (continued)	Attenuation 40 dB to 50 dB			
	9 kHz to 1 MHz	0.25° to 0.32°		
	1 MHz to 100 MHz	0.25° to 0.29°		
	100 MHz to 1 GHz	0.25° to 0.30°		
	1 GHz to 10 GHz	0.26° to 0.46°		
	10 GHz to 18 GHz	0.43° to 0.74°		
	Attenuation 50 dB to 60 dB			
	9 kHz to 1 MHz	0.29° to 0.57°		
	1 MHz to 100 MHz	0.29° to 0.52°		
	100 MHz to 1 GHz	0.29° to 0.53°		
	1 GHz to 10 GHz	0.30° to 0.63°		
	10 GHz to 18 GHz	0.46° to 0.86°		
	Attenuation 60 dB to 70 dB			
	9 kHz to 1 MHz	0.52° to 1.1°		
	1 MHz to 100 MHz	0.52° to 0.92°		
	100 MHz to 1 GHz	0.52° to 0.92°		
	1 GHz to 10 GHz	0.53° to 0.98°		
	10 GHz to 18 GHz	0.63° to 1.2°		
	Attenuation 70 dB to 80 dB			
	9 kHz to 1 MHz	0.92° to 2.6°		
	1 MHz to 100 MHz	0.91° to 1.5°		
	100 MHz to 1 GHz	0.92° to 1.5°		
	1 GHz to 10 GHz	0.92° to 1.6°		
	10 GHz to 18 GHz	0.98° to 1.7°		
	Attenuation 80 dB to 90 dB			
	9 kHz to 1 MHz	1.5° to 6.9°		
	1 MHz to 100 MHz	1.5° to 2.1°		
	100 MHz to 1 GHz	1.5° to 2.1°		
	1 GHz to 10 GHz	1.5° to 2.3°		
	10 GHz to 18 GHz	1.6° to 2.5°		
	Attenuation 90 dB to 100 dB			
	9 kHz to 1 MHz	2.1° to 21°		
	1 MHz to 100 MHz	2.1° to 3.4°		
	100 MHz to 1 GHz	2.1° to 3.4°		
	1 GHz to 10 GHz	2.1° to 4.1°		
	10 GHz to 18 GHz	2.3° to 5.3°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF VECTOR NETWORK ANALYSIS				
This section of the Schedule presents the CMCs for a vector network analysis system. Measurements are made as complex quantities. Transmission magnitude capabilities are expressed in dB terms and Reflection magnitude is expressed in terms of voltage reflection coefficient (VRC). These may also be reported in terms of voltage standing wave ratio (VSWR), return loss (dB) or Impedance magnitude and phase. Measurements are made in a 50 Ω coaxial system using an E5080B network analyser with appropriate test port leads in a 10 Hz bandwidth and 1 Hz bandwidth for transmission measurements greater than 70 dB.				
3.5 mm 50 Ω system				Site
Reflection magnitude	VRC 0.0 to 0.2 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz VRC 0.2 to 1.0 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	0.0011 to 0.0017 0.0010 to 0.0025 0.0022 to 0.0036 0.0013 to 0.0038 0.0013 to 0.0050 0.0022 to 0.0070		
Reflection phase	VRC 0 to 0.0004 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz VRC 0.0004 to 0.0005 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz VRC 0.0005 to 0.001 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz VRC 0.001 to 0.01 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz VRC 0.01 to 0.1 45 MHz to 1 GHz 1 GHz to 12 GHz 12 GHz to 26.5 GHz	180° 180° 180° 71° to 180° 69° to 180° 130° to 180° 71° to 89° 69° to 140° 130° to 180° 6.4° to 89° 6.1° to 140° 13° to 180° 0.61° to 8.3° 0.59° to 13° 1.3° to 20°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				Site
Reflection phase (continued)	VRC 0.1 to 1.0			
	45 MHz to 1 GHz	0.14° to 0.80°		
	1 GHz to 12 GHz	0.19° to 1.3°		
	12 GHz to 26.5 GHz	0.42° to 2.1°		
Transmission Magnitude	Attenuation 0 dB to 30 dB			
	45 MHz to 100 MHz	0.032 dB to 0.034 dB		
	100 MHz to 1 GHz	0.032 dB to 0.034 dB		
	1 GHz to 12 GHz	0.032 dB to 0.044 dB		
	12 GHz to 26.5 GHz	0.043 dB to 0.065 dB		
	Attenuation 30 dB to 40 dB			
	45 MHz to 100 MHz	0.033 dB to 0.036 dB		
	100 MHz to 1 GHz	0.033 dB to 0.036 dB		
	1 GHz to 12 GHz	0.033 dB to 0.046 dB		
	12 GHz to 26.5 GHz	0.043 dB to 0.066 dB		
	Attenuation 40 dB to 50 dB			
	45 MHz to 100 MHz	0.036 dB to 0.043 dB		
	100 MHz to 1 GHz	0.036 dB to 0.043 dB		
	1 GHz to 12 GHz	0.036 dB to 0.051 dB		
	12 GHz to 26.5 GHz	0.046 dB to 0.070 dB		
	Attenuation 50 dB to 60 dB			
	45 MHz to 100 MHz	0.043 dB to 0.093 dB		
	100 MHz to 1 GHz	0.043 dB to 0.093 dB		
	1 GHz to 12 GHz	0.043 dB to 0.098 dB		
	12 GHz to 26.5 GHz	0.051 dB to 0.11 dB		
	Attenuation 60 dB to 70 dB			
	45 MHz to 100 MHz	0.093 dB to 0.13 dB		
	100 MHz to 1 GHz	0.093 dB to 0.13 dB		
	1 GHz to 12 GHz	0.093 dB to 0.14 dB		
	12 GHz to 26.5 GHz	0.098 dB to 0.15 dB		
	Attenuation 70 dB to 80 dB			
	45 MHz to 100 MHz	0.13 dB to 0.18 dB		
	100 MHz to 1 GHz	0.13 dB to 0.18 dB		
	1 GHz to 12 GHz	0.13 dB to 0.18 dB		
	12 GHz to 26.5 GHz	0.14 dB to 0.19 dB		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				
Transmission Magnitude (continued)	Attenuation 80 dB to 90 dB			
	45 MHz to 100 MHz	0.17 dB to 0.25 dB		
	100 MHz to 1 GHz	0.17 dB to 0.25 dB		
	1 GHz to 12 GHz	0.17 dB to 0.27 dB		
	12 GHz to 26.5 GHz	0.18 dB to 0.32 dB		
	Attenuation 90 dB to 100 dB			
	45 MHz to 100 MHz	0.24 dB to 0.48 dB		
	100 MHz to 1 GHz	0.24 dB to 0.48 dB		
	1 GHz to 12 GHz	0.24 dB to 0.55 dB		
	12 GHz to 26.5 GHz	0.27 dB to 0.77 dB		
Transmission phase	0° to ± 180°			
	Attenuation 0 dB to 30 dB			
	45 MHz to 100 MHz	0.57° to 0.62°		
	100 MHz to 1 GHz	0.57° to 0.62°		
	1 GHz to 12 GHz	0.57° to 1.0°		
	12 GHz to 26.5 GHz	0.97° to 1.7°		
	Attenuation 30 dB to 40 dB			
	45 MHz to 100 MHz	0.61° to 0.62°		
	100 MHz to 1 GHz	0.61° to 0.62°		
	1 GHz to 12 GHz	0.61° to 1.0°		
	12 GHz to 26.5 GHz	1.0° to 1.7°		
	Attenuation 40 dB to 50 dB			
	5 MHz to 100 MHz	0.62° to 0.64°		
	100 MHz to 1GHz	0.62° to 0.64°		
	1 GHz to 12 GHz	0.62° to 1.0°		
	12 GHz to 26.5 GHz	1.0° to 1.7°		
	Attenuation 50 dB to 60 dB			
	45 MHz to 100 MHz	0.64° to 0.77°		
	100 MHz to 1 GHz	0.64° to 0.77°		
	1 GHz to 12 GHz	0.64° to 1.1°		
	12 GHz to 26.5 GHz	1.0° to 1.8°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				Site
Transmission phase (continued)	Attenuation 60 dB to 70 dB			
	45 MHz to 100 MHz	0.77° to 1.1°		
	100 MHz to 1 GHz	0.77° to 1.1°		
	1 GHz to 12 GHz	0.77° to 1.3°		
	12 GHz to 26.5 GHz	1.1° to 1.9°		
	Attenuation 70 dB to 80 dB			
	45 MHz to 100 MHz	1.1° to 1.6°		
	100 MHz to 1 GHz	1.1° to 1.6°		
	1 GHz to 12 GHz	1.1° to 1.8°		
	12 GHz to 26.5 GHz	1.3° to 2.3°		
	Attenuation 80 dB to 90 dB			
	45 MHz to 100 MHz	1.6° to 2.2°		
	100 MHz to 1 GHz	1.6° to 2.2°		
	1 GHz to 12 GHz	1.6° to 2.4°		
	12 GHz to 26.5 GHz	1.8° to 3.0°		
	Attenuation 90 dB to 100 dB			
	5 MHz to 100 MHz	2.2° to 3.6°		
	100 MHz to 1 GHz	2.2° to 3.6°		
	1 GHz to 12 GHz	2.2° to 4.1°		
	12 GHz to 26.5 GHz	2.4° to 5.6°		
2.92 mm 50 Ω system				
Reflection magnitude	VRC 0 to 0.2			
	45 MHz to 1 GHz	0.0026 to 0.0035		
	1 GHz to 26.5 GHz	0.0024 to 0.0061		
	26.5 GHz to 40 GHz	0.0051 to 0.0083		
	VRC 0.2 to 1.0			
	45 MHz to 1 GHz	0.0027 to 0.0050		
	1 GHz to 26.5 GHz	0.0025 to 0.0083		
	26.5 GHz to 40 GHz	0.0050 to 0.0089		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued) 2.92 mm 50 Ω system Reflection phase	VRC 0 to 0.0004 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz VRC 0.0004 to 0.0005 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz VRC 0.0005 to 0.001 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz VRC 0.001 to 0.01 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz VRC 0.01 to 0.1 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz VRC 0.1000 to 1.0 45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	180° 180° 180° 150° to 180° 140° to 180° 180° 150° to 180° 140° to 180° 180° 15° to 180° 14° to 180° 29° to 180° 1.4° to 19° 1.3° to 30° 2.9° to 31° 0.24° to 1.8° 0.25° to 3.0° 0.54° to 3.1°		Site



0452

Accredited to
ISO/IEC 17025:2017

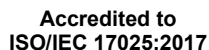
Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued) 2.92 mm 50 Ω system Transmission Magnitude	Attenuation 0 dB to 30 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 30 dB to 40 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 40 dB to 50 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 50 dB to 60 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 60 dB to 70 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 70 dB to 80 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1 GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i> Attenuation 80 dB to 90 dB <i>45 MHz to 100 MHz</i> <i>100 MHz to 1GHz</i> <i>1 GHz to 26.5 GHz</i> <i>26.5 GHz to 40 GHz</i>	0.032 dB to 0.034 dB 0.032 dB to 0.034 dB 0.032 dB to 0.060 dB 0.060 dB to 0.090 dB 0.033 dB to 0.036 dB 0.033 dB to 0.036 dB 0.033 dB to 0.061 dB 0.060 dB to 0.091 dB 0.036 dB to 0.043 dB 0.036 dB to 0.043 dB 0.036 dB to 0.066 dB 0.062 dB to 0.094 dB 0.043 dB to 0.093 dB 0.043 dB to 0.093 dB 0.043 dB to 0.11 dB 0.066 dB to 0.13 dB 0.093 dB to 0.13 dB 0.093 dB to 0.13 dB 0.093 dB to 0.14 dB 0.11 dB to 0.16 dB 0.13 dB to 0.18 dB 0.13 dB to 0.18 dB 0.13 dB to 0.19 dB 0.14 dB to 0.23 dB 0.17 dB to 0.25 dB 0.17 dB to 0.25 dB 0.17 dB to 0.32 dB 0.19 dB to 0.45 dB		Site



issued by

United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Site



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				Site
2.92 mm 50 Ω system				
Transmission phase (continued)	Attenuation 80 dB to 90 dB			
	45 MHz to 100 MHz	1.5° to 2.2°		
	100 MHz to 1 GHz	1.5° to 2.2°		
	1 GHz to 26.5 GHz	1.5° to 2.8°		
	26.5 GHz to 40 GHz	2.0° to 3.8°		
	Attenuation 90 dB to 100 dB			
	45 MHz to 100 MHz	2.1° to 3.5°		
	100 MHz to 1 GHz	2.1° to 3.5°		
	1 GHz to 26.5 GHz	2.1° to 5.4°		
	26.5 GHz to 40 GHz	2.8° to 8.6°		
2.4 mm 50 Ω system				
Reflection magnitude	VRC 0 to 0.2			
	45 MHz to 1 GHz	0.0016 to 0.0025		
	1 GHz to 26.5 GHz	0.0015 to 0.0032		
	26.5 GHz to 40 GHz	0.0024 to 0.0038		
	VRC 0.2 to 1.0			
	45 MHz to 1 GHz	0.0017 to 0.0041		
	1 GHz to 26.5 GHz	0.0017 to 0.0070		
	26.5 GHz to 40 GHz	0.0025 to 0.0095		
Reflection phase	VRC 0 to 0.0004			
	45 MHz to 1 GHz	180°		
	1 GHz to 26.5 GHz	180°		
	26.5 GHz to 40 GHz	180°		
	VRC 0.0004 to 0.0005			
	45 MHz to 1 GHz	97° to 180°		
	1 GHz to 26.5 GHz	95° to 180°		
	26.5 GHz to 40 GHz	140° to 180°		
	VRC 0.0005 to 0.001			
	45 MHz to 1 GHz	97° to 140°		
	1 GHz to 26.5 GHz	95° to 160°		
	26.5 GHz to 40 GHz	140° to 180°		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				Site
2.4 mm 50 Ω system				
Reflection phase (continued)				
	VRC 0.001 to 0.01			
	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	9.2° to 140° 8.9° to 160° 14° to 180°		
	VRC 0.01 to 0.1			
	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	4.6° to 13° 1.7° to 15° 1.5° to 19°		
	VRC 0.1 to 1			
	45 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.16° to 1.3° 0.21° to 1.7° 0.79° to 2.3°		
Transmission Magnitude				
	Attenuation 0 dB to 30 dB			
	45 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.032 dB to 0.034 dB 0.032 dB to 0.034 dB 0.032 dB to 0.060 dB 0.059 dB to 0.091 dB		
	Attenuation 30 dB to 40 dB			
	45 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.033 dB to 0.036 dB 0.033 dB to 0.036 dB 0.033 dB to 0.061 dB 0.060 dB to 0.091 dB		
	Attenuation 40 dB to 50 dB			
	45 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.036 dB to 0.043 dB 0.036 dB to 0.043 dB 0.036 dB to 0.066 dB 0.062 dB to 0.094 dB		
	Attenuation 50 dB to 60 dB			
	45 MHz to 100 MHz 100 MHz to 1 GHz 1 GHz to 26.5 GHz 26.5 GHz to 40 GHz	0.043 dB to 0.093 dB 0.043 dB to 0.093 dB 0.043 dB to 0.11 dB 0.066 dB to 0.13 dB		



0452

Accredited to
ISO/IEC 17025:2017

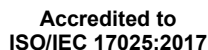
Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
HF Vector Network Analysis (continued)				Site
2.4 mm 50 Ω system				
Transmission Magnitude (continued)				
	Attenuation 60 dB to 70 dB			
	45 MHz to 100 MHz	0.093 dB to 0.13 dB		
	100 MHz to 1 GHz	0.093 dB to 0.13 dB		
	1 GHz to 26.5 GHz	0.093 dB to 0.14 dB		
	26.5 GHz to 40 GHz	0.11 dB to 0.16 dB		
	Attenuation 70 dB to 80 dB			
	45 MHz to 100 MHz	0.13 dB to 0.18 dB		
	100 MHz to 1 GHz	0.13 dB to 0.18 dB		
	1 GHz to 26.5 GHz	0.13 dB to 0.19 dB		
	26.5 GHz to 40 GHz	0.14 dB to 0.23 dB		
	Attenuation 80 dB to 90 dB			
	5 MHz to 100 MHz	0.17 dB to 0.25 dB		
	100 MHz to 1 GHz	0.17 dB to 0.25 dB		
	1 GHz to 26.5 GHz	0.17 dB to 0.32 dB		
	26.5 GHz to 40 GHz	0.19 dB to 0.45 dB		
	Attenuation 90 dB to 100 dB			
	45 MHz to 100 MHz	0.24 dB to 0.48 dB		
	100 MHz to 1 GHz	0.24 dB to 0.48 dB		
	1 GHz to 26.5 GHz	0.24 dB to 0.77 dB		
	26.5 GHz to 40 GHz	0.31 dB to 1.2 dB		
Transmission phase	0° to $\pm 180^\circ$			
	Attenuation 0 dB to 30 dB			
	45 MHz to 100 MHz	0.28° to 0.38°		
	100 MHz to 1 GHz	0.28° to 0.38°		
	1 GHz to 26.5 GHz	0.28° to 1.2°		
	26.5 GHz to 40 GHz	1.2° to 2.1°		
	Attenuation 30 dB to 40 dB			
	45 MHz to 100 MHz	0.36° to 0.38°		
	100 MHz to 1 GHz	0.36° to 0.38°		
	1 GHz to 26.5 GHz	0.36° to 1.3°		
	26.5 GHz to 40 GHz	1.3° to 2.1°		



issued by

United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Site



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF MODULATION			Measurement and generation of amplitude and frequency modulated signals using spectrum analyser and audio analyser.	
Amplitude Modulation	Demodulated distortion less than or equal to 5 % 0 % _{AM} to 20 % _{AM} 20 % _{AM} to 50 % _{AM} 50 % _{AM} to 80 % _{AM} 80 % _{AM} to 95 % _{AM} Demodulated distortion 5 % to 10 %. 0 % _{AM} to 20 % _{AM} 20 % _{AM} to 50 % _{AM} 50 % _{AM} to 80 % _{AM} 80 % _{AM} to 95 % _{AM}	0.30 % _{AM} 0.41 % _{AM} 0.81 % _{AM} 1.3 % _{AM} 0.65 % _{AM} 0.71 % _{AM} 0.99 % _{AM} 1.4 % _{AM}	f_c 100 kHz to 1 GHz. f_{mod} 30 Hz to 50 kHz, or $0.2 \times f_c$. f_c 100 kHz to 1 GHz. f_{mod} 30 Hz to 50 kHz, or $0.2 \times f_c$.	
Frequency Modulation	Demodulated distortion less than or equal to 10 % . 0 Hz to 5 kHz 5 kHz to 20 kHz 20 kHz to 100 kHz 100 kHz to 700 kHz	0.17 kHz 0.18 kHz 0.79 kHz 3.6 kHz	f_c 100 kHz to 1 GHz. f_{mod} 30 Hz to 50 kHz, or $0.2 \times f_c$.	



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
RF MODULATION (continued)				Site
Modulation distortion THD _R	0 % to 5 % 30 Hz to 20 kHz 20 kHz to 50 kHz	0.078 % THD _R 0.090 % THD _R	f_c 100 kHz to 1 GHz.	
	5 % to 10 % 30 Hz to 20 kHz 20 kHz to 50 kHz	0.12 % THD _R 0.15 % THD _R	f_c 100 kHz to 1 GHz.	
RF INTERMODULATION PRODUCTS	300 kHz to 18 GHz	0.48 dB		
TRANSITION TIME				
Measurement	300 ps to 600 ps 600 ps to 10 s	1.3 % 0.90 %	For the calibration of pulse generators and similar devices	
Generation	300 ps to 600 ps 600 ps to 10 s	1.5 % 1.2 %	For the calibration of oscilloscopes and other measurement devices with bandwidth up to 500 MHz.	
IMPULSE MEASUREMENTS				
Detector Pulse Measurements	9 kHz to 10 MHz 10 MHz to 50 MHz 50 MHz to 1 GHz	0.57 dB 0.55 dB 0.56 dB	Absolute and relative CISPR detector response to pulses and response to varying repetition rates	
Detector response to narrowband interference	Band A to D	0.096 dB	Average and RMS CISPR detector response to any drifting narrow band interference	



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
ISN MEASUREMENTS				Site
This section of the Schedule presents the CMCs for the measurement of characteristics of Impedance Stabilisation Networks (ISNs) to the requirements of CISPR 16-1-2, CISPR 22 and CISPR 32 using a vector network analysis system. Measurements are made in a 50 Ω coaxial system using a network analyser with appropriate test port leads, adaptors and transitions in a 1 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.				
Common Mode Impedance	150 kHz to 30 MHz			
Magnitude	50 Ω to 250 Ω	2.0 %		
Phase	0° to 180°	3.0°		
Voltage Division Factor	150 kHz to 30 MHz	0.20 dB		
Decoupling Attenuation	150 kHz to 30 MHz 0 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.30 dB 1.0 dB 2.7 dB		
Longitudinal Conversion Loss	150 kHz to 30 MHz 30 dB to 85 dB Cat. 3 Cat. 5 Cat. 6	0.25 dB 0.35 dB 0.65 dB		
Transmission Loss	100 kHz to 300 MHz 0 dB to 20 dB	0.10 dB		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
BULK CURRENT INJECTION PROBES	Insertion loss <i>1 kHz to 500 MHz</i> 0 dB to 20 dB 20 dB to 70 dB 70 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.053 dB 0.11 dB 0.16 dB 0.40 dB 1.8 dB	Using vector network analyser.	Site
RF CURRENT PROBES	Insertion loss <i>10 Hz to 10 kHz</i> 0 dB to 90 dB 90 dB to 100 dB 100 dB to 110 dB 110 dB to 120 dB	0.075 dB 0.086 dB 0.12 dB 0.30 dB	Using FFT analyser.	
	<i>1 kHz to 500 MHz</i> 0 dB to 20 dB 20 dB to 70 dB 70 dB to 80 dB 80 dB to 90 dB 90 dB to 100 dB	0.084 dB 0.15 dB 0.20 dB 0.51 dB 1.8 dB	Using vector network analyser.	
BURST TRANSIENT GENERATOR CHARACTERISTICS				
Peak voltage	0.1 kV to 5 kV	2.6 %	For the calibration of Electrical Fast Transient generators, Coupling Clamps and CDNs to EN 61000-4-4	
Rise time	3.5 ns to 50 s	0.91 %		
Pulse width	10 ns to 100 ns	0.91 %		
Repetition Frequency	1 kHz to 1 MHz	0.91 %		
Burst duration	100 μs to 100 ms	0.91 %		
Burst period	1 ms to 1 s	0.14 %		
SURGE PULSE CHARACTERISTICS				
Voltage	0.25 kV to 6.6 kV	2.1 %	For the calibration of Surge generators and coupling Networks to EN 61000-4-5 EN61000-4-9 EN6255-22-5	
Current	0.2 kA to 3.3 kA	2.8 %		
Impedance	1 Ω to 100 Ω	4.6 %		
Front/Rise Time	0.1 μs to 50 μs	0.91 %		
Pulse Duration	1 μs to 1 ms	0.91 %		
Phase	0° to 360°	0.5° to 3.3°		



0452

Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited

Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code	
VOLTAGE DIPS, SHORT INTERRUPTIONS, VOLTAGE VARIATIONS GENERATORS					
Dip RMS Voltage	1 V to 500 V	0.58 % + 50 mV	For the calibration of Voltage Dips and Interrupts generators in accordance with EN 61000-4-11	Site	
Voltage Variations	1 V to 500 V	1.5 %			
Transition rise and fall time	0.1 μ s to 1 s	0.91 %			
Interruptions Overshoot Voltage	25 % to 100 %	2.8 %			
Phase Angle	0° to 360°	2.9°			
Dip Variations timing	10 μ s to 30 s	0.91 %			
Peak Inrush Current	1 A to 1000 A	1.9 %			
DISCONTINUOUS INTERFERENCE ANALYSERS	Pulse Timings - Period and Width	0.16 %	Application of Pulses 1 to 12 as given in Table 14, CISPR 16-1-1 and in Table F1, CISPR 16-1-1.		
	Pulse Level Step Measurement	0.19 dB			
DAMPED OSCILLATORY GENERATORS					
Voltage	100 V to 6.6 kV <i>Frequency ≤ 1 MHz</i> <i>Frequency 1 MHz to 50 MHz</i>	2.1 % 2.9 %	For the calibration of Damped Oscillatory Wave Generators in accordance with EN 61000-4-10, EN 61000-4-12, EN 61000-4-18, ANSI C37.90.1		
Ringwave Current	1 A to 400 A	2.8 %			
DOW Current	1 A to 150 A	3.6 %			
Impedance	5 Ω to 500 Ω	4.6 %			
Rise time	1 ns to 10 μ s	0.91 %			
Frequency	10 kHz to 100 MHz	0.91 %			
Repetition Rate	100 μ s to 1 s	0.91 %			
Burst Duration	1 ms to 5 s	0.91 %			
Phase	0° to 360°	3.3°			
Burst Period	1 ms to 1 s	0.14 %			
FLICKER					
Measurement and Generation	Pst values from 0.4 to 6, with 1 to 500 changes per minute.	0.37 %	In accordance with EN61000-4-15		
LISN MEASUREMENTS					
This section of the Schedule presents the CMCs for the measurement of complex impedance of a Line Impedance Stabilisation Network (LISN) using a vector network analysis system. Measurements are made as complex quantities. Reflection magnitude is expressed in terms of Impedance with Magnitude and Phase. Measurements are made in a 50 Ω coaxial system using an Agilent E5061B network analyser with appropriate test port leads in a 10 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.					



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
LISN Measurements (continued)				Site
N Type 50 Ω system				
Impedance Magnitude	Magnitude 0 Ω to 150 Ω 1 kHz to 9 kHz 9 kHz to 150 kHz 150 kHz to 30 MHz 30 MHz to 300 MHz 300 MHz to 400 MHz	0.23 Ω 0.27 Ω 0.82 Ω 2.3 Ω 4.1 Ω		
Impedance Phase	Phase 0° to 180° 9 kHz to 108 MHz	0.87°		
Voltage Division	1 kHz to 400 MHz	0.18 dB		
Isolation	9 kHz to 108 MHz 0 dB to 70 dB 60 dB to 100 dB	0.22 dB 2.5 dB		
CDN MEASUREMENTS				
This section of the Schedule presents the CMCs for the measurement of complex impedance of a CDN using a vector network analysis system. Measurements are made as complex quantities. Reflection magnitude is expressed in terms of Impedance with Magnitude and Phase. Measurements are made in a 50 Ω coaxial system with appropriate test port leads in a 10 Hz bandwidth. Actual uncertainties are calculated dynamically during the measurement and may be larger than indicated below.				
Impedance Magnitude	Magnitude 50 Ω to 250 Ω 10 kHz to 80 MHz 80 MHz to 230 MHz 230 MHz to 300 MHz	1.6 % 3.7 % 4.2 %		
Impedance Phase	Phase 0° to 180° 10 kHz to 300 MHz	5.0°		
Coupling Factor	10 kHz to 300 MHz 0 dB to 30 dB	0.30 dB		
Isolation	10 kHz to 300 MHz 0 dB to 70 dB 70 dB to 100 dB	0.22 dB 2.5 dB		



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks	Location code
ELECTROSTATIC DISCHARGE GENERATORS				Site
Air discharge voltage	0.5 kV to 30 kV	0.73 %	EN61000-4-2	
Pulse transition time	500 ps to 50 ns	2.2 %	ISO10605	
Peak current	0.1 A to 150 A	3.7 %	EN61340-3-1	
Decay current	0.1 A to 150 A	5.0 %	MIL-STD-331	
ELECTRICAL SIMULATION OF TEMPERATURE				
Thermocouple simulation	Type K, -200 °C to +1372 °C Type J, -200 °C to +1200 °C Type E, -200 °C to +1000 °C Type N, -200 °C to +1300 °C Type T, -200 °C to +400 °C Type S, 0 °C to +1768 °C Type R, 0 °C to +1768 °C Type B, 0 °C to +1820 °C	0.12 °C to 0.30 °C 0.12 °C to 0.23 °C 0.12 °C to 0.22 °C 0.12 °C to 0.27 °C 0.12 °C to 0.22 °C 0.18 °C to 0.29 °C 0.17 °C to 0.28 °C 0.19 °C to 0.34 °C	EN61000-4-2 ISO10605 EN61340-3-1 MIL-STD-331 EIA/JES22-A114-B EIA/JES22-A115-A The measurement bandwidth is the lowest specified by the associated standard.	
Pt100 simulation	Thermocouple CJC at ambient -200 °C to 0 °C 0 °C to +400 °C +400 °C to +850 °C	0.22 °C 0.027 °C to 0.049 °C 0.049 °C to 0.12 °C 0.12 °C to 0.21 °C	For calibration of temperature indicators, recorders etc. Excluding cold junction compensation (CJC).	
--- END ---				



0452
Accredited to
ISO/IEC 17025:2017

Schedule of Accreditation
issued by
United Kingdom Accreditation Service
2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Eurofins Electrical & Electronic UK Limited
Issue No: 046 Issue date: 17 July 2025

Calibration performed by the Organisation at the locations specified

Appendix - Calibration and Measurement Capabilities

Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand. Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where q is the quantity value.

The notation $Q[a, b]$ stands for the root-sum-square of the terms between brackets: $Q[a, b] = [a^2 + b^2]^{1/2}$