Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

0026

Accredited to ISO/IEC 17025:2017

Element Materials Technology Warwick Ltd

Issue No: 175 **Issue date:** 12 April 2025

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Warwick
CV34 5JX

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Testing performed by the Organisation at the locations specified below

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details		Activity	Location code
Address Rothwell Road Warwick CV34 5JX	**Local contact** Mrs D White Mr M Pitham (Structural/Fatigue) Tel: +44 (0)1926 478478 Fax: +44 (0)1926 478479 E-Mail: info.warwick@element.com Website: www.element.com	Environmental Ingress Protection Pressure Structural/Fatigue	P
Address 100 Frobisher Business Park Leigh Sinton Road Malvern Worcestershire WR14 1BX	**Local contact** Mr I Forshaw Tel: +44 (0)1684 571700 Fax: +44 (0)1684 571701 E-Mail: info.malvern@element.com Website: www.element.com	EMC	A
Address Unit 1 Pendle Place Skelmersdale West Lancashire WN8 9PN	**Local contact** J Charters Tel: +44 (0)1695 556666 Fax: +44 (0)1695 557077 E-Mail: info.skelmersdale@element.com Website: www.element.com	EMC EX Product Testing Ingress Protection Radio	B H
Address 74-78 Condor Close Woolsbridge Industrial Park Three Legged Cross Wimborne Dorset BH21 6SU	**Local contact** Mr A Coombes Tel: +44 (0)1202 811700 Fax: +44 (0)1202 811701 E-Mail: info.wimborne@element.com Website: www.element.com	EMC	C

Location details		Activity	Location code
Address Unit E South Orbital Trading Park Hedon Road Hull HU9 1NJ	**Local contact** Mr P. Harrison Tel: +44 (0)1482 801801 Fax: +44 (0)1482 801806 E-Mail: info.hull@element.com Website: www.element.com	Electrical Safety Environmental Engineering (Climatic/Dynamic)	F
Address Unit E South Orbital Trading Park Hedon Road Hull HU9 1NJ	**Local contact** Mr M Baker (EMC) Mr L Giddings (Telecoms) Tel: +44 (0)1482 801801 Fax: +44 (0)1482 801806 E-Mail: info.hull@element.com Website: www.element.com	EMC Telecoms	G
Address Units 13/15 Nuffield Way Abingdon Oxfordshire OX14 1RL	**Local Contact** Mr A Coombes 01235 540970	EMC	K
Address Unit 15b Henley Business Park Pirbright Road Guildford Surrey GU3 2DX	**Local Contact** Mr P Blackett Tel: TBC E-mail: Paul.blackett@element.com	EMC Radio SAR	S

0026 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
	Element Materials Technology Warwick Ltd **Issue No:** 175 **Issue date:** 12 April 2025
Testing performed by the Organisation at the locations specified	

Site activities performed away from the locations listed above:

Location details		Activity	Location code
Address Any Customer Premises	**Local contact** Mr K Anderson (EMC) Mr P. Harrison (Electrical Safety) Tel: +44 (0)1482 801801 Fax: +44 (0)1684 571701 E-Mail: info.hull@element.com Website: www.element.com	EMC Electrical Safety	E
Address Any Customer Premises	**Local contact** Mr J Charters (Ex Product) Tel: +44 (0)1695 556666 Fax: +44 (0)1695 557077 E-Mail: info.skelmersdale@element.com Website: www.element.com	Ex Product Testing	I

Flexible Scope

The laboratory is accredited for the use of a Flexible Scope for testing activities in the areas of EMC (Military and Commercial), Radio, SAR and in the areas of Electrical Safety, Environmental Testing and Ex Product Testing as detailed within Element In House procedure EL-CTE-QU-X-X-SOP101465.

This may include tests on the same or similar product types against standards, or customer-specified methods that are not specifically listed in this Schedule for EMC Military, EMC Commercial, Radio, SAR, Electrical Safety, Ex Product Testing and Environmental Testing providing that:
(1) The method or standard does not introduce new principles of measurement.
(2) The method or standard does not require measurements to be made outside the parametric boundaries defined in this Schedule.

Information about flexible scopes of accreditation is available in UKAS document GEN 4

NOTE: Where EN Standards have exact equivalents in IEC, or BS EN Standards, these are also included in the accreditation

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: AEROSPACE STRUCTURES, MATERIALS AND EQUIPMENT AGRICULTURAL EQUIPMENT COMPUTERS AND PERIPHERALS CONSTRUCTION PLANT, EQUIPMENT, PRODUCTS AND MATERIALS CRYOGENIC EQUIPMENT DOMESTIC APPLIANCES ELECTRICAL/ELECTRONIC COMPONENTS, CONNECTORS AND PRODUCTS ELECTRO-MECHANICAL DEVICES FIREARMS FIRE FIGHTING AND DETECTION EQUIPMENT HYDRAULIC EQUIPMENT AND FITTINGS MARINE EQUIPMENT MECHANICAL PRODUCTS AND PLANT MINING EQUIPMENT AND COMPONENTS MISSILE AND COMPONENTS MOTOR VEHICLE ACCESSORIES AND COMPONENTS OFFICE EQUIPMENT PACKAGES AND PACKAGING MATERIAL PLASTICS AND PRODUCTS PRESSURE VESSELS RADAR EQUIPMENT RADIO AND TV EQUIPMENT	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** 1.1 CLIMATIC 1.1.1 High temp – low humidity **- constant and cyclic** Max temp: +170 °C Max chamber size: 1.2 m x 1.2 m x 1.2 m Max temp: +70 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	DEF STAN 00-35 Pt 3, Iss3:1999 Tests CL1 and CL2 DEF STAN 00-35 Pt 3, Iss4:2006 Tests CL1 and CL2 DEF STAN 00-035 Pt 3, Iss5:2017 Test CL2 ETSI EN 300 019-2-1:2000 ETSI EN 300 019-2-1 v2.3.1 2017-11 ETSI EN 300 019-2-2:1999 ETSI EN 300 019-2-2:2013 ETSI EN 300 019-2-3:2003 ETSI EN 300 019-2-3:2015 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E: 2004 RTCA DO 160F: 2007 RTCA DO 160G: 2010 RTCA DO 160G: CN1: 2014 TR 2130C:2005 TR 2130D:2011 TR 2130E:2014 BS EN 50155:10.2.4:2007 BS EN 50155:13.4.5:2017 BS EN 50133-1:1997 BS EN 60839-11-1:2013 BS EN 60068-2-2:2007 BS EN 60945:2002 IEC 68-2-2:1974(1994) BS 3G100: Part 2:Subsect 3.2: 1970(1983) DEF STAN 07-55:1983 Tests B1, B2 MIL-STD 810B:1967 Method 501 MIL-STD 810C:1975 Method 501.1 MIL-STD 810D:1983 Method 501.2 MIL-STD 810E:1983 Method 501.3 MIL-STD 810F:1989 Method 501.4 MIL-STD 810G:2008 Method 501.5 MIL-STD 810G:CN1:2014 Method 501.6 MIL-STD 810H:2019 Method 501.7	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
GENERAL NON-EXPLOSIVE STORES AND EQUIPMENT including: (cont'd) SAFETY APPLIANCES AND EQUIPMENT SATELLITES AND SUB-ASSEMBLIES SECURITY DEVICES AND ALARMS STRUCTURES AND COMPONENTS TELECOMMUNICATION EQUIPMENT THERMAL IMAGING WEAPONS AND SUB-ASSEMBLIES	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.1 High temp – low humidity **- constant humidity** Max temp: +500 °C Max chamber size: 0.54 m x 0.47 m x 0.54 m	JCPS 05-07:1987, Clause 7.1.4.2 NES 1004:1995 Data Sheet 7 DEF STAN 08-123:2000 Data Sheet 7 DEF STAN 08-123: Iss 2: 2012 Data Sheet 7 Lloyds Register Specification No 1:1996: Dry Heat Test Lloyds Register Specification No 1:2013: Section 17	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd)		
	1.1.2 Low temperature **- constant and cyclic**	DEF STAN 00-35 Pt 3, Iss3:1999 Tests CL4 and CL5 DEF STAN 00-35 Pt 3, Iss4:2006 Tests CL4 and CL5 DEF STAN 00-035 Pt 3, Iss5:2017 Tests CL5 BS EN 60068-2-1:2007	P
	Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 1.2 m	Tests Aa, Ab, Ad ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2:2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 IEC 68-2-1:1990	
	Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS 3G100: Part 2: Subsect 3.2: 1970(1983) RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E: 2004 RTCA DO 160F: 2007 RTCA DO 160G: 2010 RTCA DO 160G: CN1: 2014 DEF STAN 07-55:1983 Tests B4, B5 BS EN 50155:12.2.3 and 12.2.14:2007 BS EN 50155:13.4.4 and 13.4.6.:2017 MIL-STD 810B:1967 Method 502 MIL-STD 810C:1975 Method 502.1 MIL-STD 810D:1983 Method 502.2 MIL-STD 810E:1989 Method 502.3 MIL-STD 810F:2003 Method 502.4 MIL-STD 810G:2008 Method 502.5 MIL-STD 810G:CN1 2014 Method 502.6 MIL-STD 810H:2019 Method 502.7 BS EN 50133-1:1997 BS EN 60839-11-1:2013 NES 1004:1995 Data Sheet 8	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.2 Low temperature **- constant and cyclic** (cont'd)	DEF STAN 08-123:2000 Data Sheet 8 DEF STAN 08-123 Issue 2:2012 Data Sheet 8 Lloyds Register Specification No 1:1996: Low temperature test	P
	1.1.3 Thermal Shock a) Automatic transference Max temp: +170 °C Min temp: -70 °C Max chamber size: 0.6 m x 0.6 m x 0.4 m b) Manual transference Max temp: +170 °C Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 0.9 m	BS EN 60068-2-14:2000 Tests Na, Nb BS EN 60068-2-14:2009 Tests Na, Nb BS 3G100: Part 2: Subsect 3.15:1978(1983) DEF STAN 00-35 Pt 3, Iss3:1999 CL14 DEF STAN 00-35 Pt 3, Iss4:2006 CL14 DEF STAN 00-035 Pt 3, Iss5:2017 CL14 DEF STAN 07-55:1983 Test B14 MIL-STD 810B:1967 Method 503 MIL-STD 810C:1975 Method 503.1 MIL-STD 810D:1983 Method 503.2 MIL-STD 810E:1989 Method 503.3 MIL-STD 810F:2003 Method 503.4 MIL-STD 810G:2008 Method 503.5 MIL-STD 810G:CN1 2019 Method 503.6 MIL-STD 810H:2008 Method 503.7	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.4 Temperature Change/Variation Max temp: +200 °C Min temp: -70 °C Max chamber size: 1.2 m x 1.2 m x 0.9 m	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:5.3:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015	P
	1.1.5 High temp - high humidity **- constant and cyclic** Max temp: +70 °C Humidity range: 10 to 98% rh Max chamber size: 4.0 m x 2.5 m x 2.5 m Max temp: +80 °C Humidity range: 30 to 98% rh Max chamber size: 0.91 m x 0.91 m x 0.91 m	DEF STAN 00-35 Pt 3, Iss3:1999 Test CL7 DEF STAN 00-35 Pt3, Iss4:2006 Test CL7 DEF STAN 00-035 Pt 3,Iss5:2017 Test CL6 NES 1004:1995 Data Sheet 7 DEF STAN 08123:2000 Data Sheet 7 DEF STAN 08-123 Issue 2:2012 Data Sheet 7 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G:CN1:2014 MIL-STD 810B:1967 Method 507 MIL-STD 810C:1975 Method 507.1 MIL STD 810D:1983 Method 507.3	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.5 High temp - high humidity **- constant and cyclic** (cont'd)	MIL STD 810D:1983 Method 507.3 MIL-STD 810E:1989 Method 507.3 MIL-STD 810F:2003 Method 507.4MIL-STD 810G:2008 Method 507.5 MIL-STD 810G;CN1:2014 Method 507.6 MIL-STD 810H:2019 Method 507.6 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS EN 50155:10.2.5:2007 BS EN 5015513.4.7:2017 BS 2011: Ca:1977 BS 2011: Cab:1990 BS 2011: Cb:1990 BS EN 60068-2-30:2005 BS EN 60068-2-78:2002 BS EN 60068-2-78:2013 BS EN 60945:2002 IEC 68-2-3:1969 IEC 60068-2-30:1980 IEC 68-2-56:1988 BS 3G100: Part 2:Subsect 3.7: 1972(1983) DEF STAN 07-55:1983 Tests B6, B7 ETSI EN 300 19-2-1:2000 ETSI EN 300 19-2-1v2.3.1(2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 19-2-2:2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 19-2-3:2015 NES 1004:1995 Data Sheet 9 DEF STAN 08-123:2000 Data Sheet 9 DEF STAN 08-123 Issue 2:2012 Data Sheet 9	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.5 High temp - high humidity **- constant and cyclic** (cont'd)	Lloyds Register Specification No 1:1996: Humidity tests 1 and 2 Lloyds Register Specification No 1:2013 Sections 14 and 15	P
	1.1.6 High/low temp - low/high pressure (atmospheric) - high humidity (combined and sequential) Temperature range: -70 °C to +150 °C Humidity range: 30 to 98 %rh Pressure range: 35 mbar to 1090 mbar Chamber size: 1.01 m x 1.01 m x 1.02 m	BS EN 60068-2-13:1999 BS EN 60068-2-40:2000 BS EN 60068-2-41:2000 BS EN 60068-2-61:1994 DEF STAN 00-35 Pt 3, Iss 3:1999 Tests CL11, CL12 and CL21 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests CL11, CL12, and CL21 DEF STAN 00-035 Pt 3, Iss 5:2017 test CL11 DEF STAN 07-55:1983 Test B11 and B12 MIL-STD 202F:105C:1980 MIL-STD 810B:1967 Method 500 MIL-STD 810C:1975 Method 500.1 MIL-STD 810D:1983 Method 500.2 Method 520 MIL-STD 810E:1989 Method 500.3 Method 520.1 MIL-STD 810F:2003 Method 500.4 Method 520.2 MIL-STD 810G:2008 Method 500.5 Method 520.3 MIL-STD 810G w/Change 1:2014 Method 500.6 Method 520.4 MIL-STD 810H:2019 Method 500.6 Method 520.5 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RCTA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.7 Dust and Sand - Driving Chamber size: 1.5 m x 1.5 m x 2.5 m Temperature Range: +20 to +71 °C Maximum Test Area: 200 mm diameter Maximum Velocity: 25 m/s with 200 mm dia Duct 40 m/s with 140 mm dia Duct Dust Concentration: 0.1 g/m3 to 20 g/m3	DEF STAN 07-55:1983 Test D1 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:12.0:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 MIL-STD 810B:1967 Method 510 MIL-STD 810C:1975 Method 510.1 MIL STD 810D:1983 Method 510.2 MIL-STD 810E:1989 Method 510.3 MIL-STD 810F:2003 Method 510.4 MIL-STD 810G:2008 Method 510.5 MIL-STD 810G:CN1:2014 Method 510.6 MIL-STD 810H:2019 Method 510.7 Procedures I and II DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL25 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL25 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL25	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.8 Dust and Sand - Turbulent Chamber size: 1.5 m x 1.5 m x 2.5 m Temperature Range: +20 to +70 °C Dust Concentration: 0.1 g/m^3 to 20 g/m^3	DEF STAN 07-55:1983 Test D1 DEF 133:1971 para 10	P
	1.1.9 Drip Proof Drip Tray area: 0.77 m x 0.77 m	ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v2.3.1(2017-11) BS 3G100: Part 2: Subsect 3.11: 1973(1983) Grade B RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:10.3.1:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL28 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL28 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL28 BS EN 60068-2-18:2001 BS EN 60068-2-18:2017 IEC 60068-2-18:2000 IEC 60068-2-18:2017 DEF STAN 07-55:1983 Test D4 BS EN 50133-1:1997	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.9 Drip Proof (cont'd)	MIL-STD 810B:1967 Method 506 MIL-STD 810C:1975 Method 506.1 MIL STD 810D:1983 Method 506.2 MIL-STD 810E:1989 Method 506.3 MIL-STD 810F:2003 Method 506.4 MIL-STD 810G:2008 Method 506.5 Procedure III MIL-STD 810G CN 1:2014 Method 506.6 Procedure III MIL-STD 810H:2019 Method 506.6 Procedure III	P
	1.1.11 Spray Proof Max Item size: 3.0 m x 3.0 m x 3.0 m	RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.12 Driving Rain Max item size: 3.0 m x 3.0 m x 3.0 m (single pass)	BS EN 60068-2-17:1995 IEC 68-2-17:1994 BS 3G100: Part 2: Subsect 3.11:1973(1983) Grade B DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL27 DEF STAN 00-35 Pt 3, Iss4: 2006 Test CL27 DEF STAN 00-035 Pt 3, Iss5:2017 Test CL27 DEF STAN 07-55:1983 Test D3 NES 1004:1995 Data Sheet 18 DEF STAN 08-123:2000 Data Sheet 18 DEF STAN 08-123 Issue 2:2012 Data Sheet 18	P
	1.1.13 Icing/Freezing Rain Min temp: -50 °C Max chamber size: 4.0 m x 2.5 m x 2.5 m	MIL STD 810D: 1983 Method 521.0 MIL-STD 810E:1989 Method 521.1 MIL-STD 810F:2003 Method 521.2 MIL-STD 810G:2008 Method 521.3 MIL-STD 810G CN1:2014 Method 521.4 MIL-STD 810H:2019 Method 521.4 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:24.0:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL10 DEF STAN 00-35 Pt 3, Iss4:2006 Test CL10	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.13 Icing/Freezing Rain (cont'd)	DEF STAN 00-035 Pt 3, Iss5:2017 Test CL10 NES 1004:1995 Data Sheet 15 DEF STAN 08-123:2000 Data Sheet 15 DEF STAN 08-123 Issue 2:2012 Data Sheet 15	P
	1.1.14 Corrosion Salt Max chamber size: 1.9 m x 1.2 m x 0.9 m	BS EN 60068-2-11:1999:Ka BS EN 60068-2-52:1996:Kb BS EN 60068-2-52:2018:Kb IEC 68-2-11:1981 IEC 68-2-52:1996 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS 3G100: Part 2: Subsection 3.8:1977(1983) BS EN 50155:12.2.10:2007 BS EN 50155:13.4.10:2017 BS EN ISO 9227:2006: NSS BS EN ISO 9227:2017: NSS DEF STAN 07-55:1983 Tests C2, C5 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:14.0:2007 RTCA DO 160G:2010 RTCA DO 160G:CN1:2014 MIL-STD 810B:1967 Method 509 MIL-STD 810C:1975 Method 509.1 MIL STD 810D:1983 Method 509.2 MIL-STD 810E:1989 Method 509.3 MIL-STD 810F:2003 Method 509.4 MIL-STD 810G:2008 Method 509.5	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.1 CLIMATIC (cont'd) 1.1.14 Corrosion Salt (cont'd)	MIL-STD 810G CN1:2014 Method 509.6 MIL-STD 810H:2019 Method 509.7 DEF STAN 00-35 Pt 3, Iss 3:1999 Tests CN2 and CN5 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests CN2 and CN5 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests CN2 and CN5 NES 1004:1995, Data Sheet 21 DEF STAN 08-123:2000 Data Sheet 21 DEF STAN 08-123 Issue 2:2012 Data Sheet 21 Lloyds Register Specification No 1:1996: Salt mist Lloyds Register Specification No 1:2013 Section 16 BS EN 60068-2-52:2018: Kb IEC 68-2-11:1981 IEC 68-2-52:1996 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS 3G100: Part 2: Subsection 3.8:1977(1983) BS EN 50155:12.2.10:2007 BS EN 50155:13.4.10:2017 BS EN ISO 9227:2006: NSS BS EN ISO 9227:2017: NSS	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (a) Ambient Temperature **(electromagnetic)** Freq range: 3 to 3000 Hz Max peak thrust: 160 kN Max payload (vertical): 2000 kg Max payload (horizontal): 7000 kg Max displacement: 40 mm pk-pk (b) High/Low Temperature (Prefabricated Enclosure) Max temp: +150 °C Min temp: -70 °C	NES 1004:1995 Data Sheet 25 (externally generated) DEF STAN 08-123:2000 Data Sheet 25 (externally generated) DEF STAN 08-123 Issue 2:2012 Data Sheet 25 (externally generated) DEF STAN 07-55:1983 Test A1 Test A2 MIL-STD 810B:1967 Method 514 Method 519 MIL-STD 810C:1975 Method 514.2 Method 519.2 MIL STD 810D:1983 Method 514.3 Method 519.3 MIL-STD 810E:1989 Method 514.4 Method 519.4 MIL-STD 810F:2003 Method 514.5 Method 519.5 MIL-STD 810G:2008 Method 514.6 Method 519.6 MIL-STD 810G CN1:2014 Method 514.7 Method 519.7 MIL-STD 810H:2019 Method 514.8 Method 519.8	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.1 Vibration Sine, random, broadband random, swept sine, fixed sine dwell, notching, force notching, sine-on-random, random-on-random, sine-on-random-on-random, and gunfire - with slip table facility	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M1 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M1 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M1 BS 2011: Fd:1973(1984) BS 2011: Fda:1973(1984) BS 2011: Fdb:1973(1984) BS 2011: Fdc:1973(1984) BS EN 60068-2-6:2008:Fc BS EN 60945:2002 IEC 60068-2-64:2008 IEC 68-2-6:1993 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS 3G100: Part 2: Subsection 3.1:1969(1983) RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014IEC 61373:1999 IEC 61373:2010	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.1 Vibration (cont'd)	BS EN 50155-1:2007 BS EN 50155:13.4.11:2017 BS EN 60255-21-1:1996 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 MIL-STD167-1A 2005	P
	1.2.2 Shock Classical shock with half sine, initial and terminal peak sawtooth, trapezoidal, and rectangular pulse shape Shock response spectrum synthesis (SRS) **- Vertical** half sine, sawtooth Max item mass: 2000 kg	DEF STAN 00-35 Pt 3, Iss 3:1999 Tests M3, M6 and M7 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests M3, M6 and M7 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M3 and M6 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CN1:2014 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS EN 60068-2-27:1993:Ea BS EN 60068-2-27:2009 EN 60068-2-81:2003 IEC 68-2-27:1987	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.2 Shock (cont'd) **- Ambient temperature** Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent) **- with temperature (prefabricated enclosure)** Severity: 3 g to 1500 g Duration: 0.2 ms to 70 ms (severity dependent) Max temp: +150 °C Min temp: -70 °C	DEF STAN 07-55:1983 Test A3 MIL-STD 810B:1967 Method 516 MIL-STD 810C:1975 Method 516.2 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003 Method 516.5MIL-STD 810G:2008 Method 516.6 MIL-STD 810G:CN1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8BRB/RIA 20:1995 IEC 61373:1999 IEC 61373:2010 BS EN 50155:12.2.11:2007 BS EN 50155:13.4.11:2017 BS EN 60255-21-2:1996 BS EN 60255-21-1:1996 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 NES 1004:1995, Data Sheet 28 DEF STAN 08-123:2000 Data Sheet 28 DEF STAN 08-123 Issue 2:2012 Data Sheet 28	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.2 Shock (cont'd) **- Horizontal** half sine, sawtooth Max item mass: 7000 kg	DEF STAN 00-35 Pt 3, Iss 3:1999 Tests M3, M6 and M7 DEF STAN 00-35 Pt 4, Iss 4:2006 Tests M3, M6 and M7 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M3 and M6 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014	P
	- ambient temperature Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent)	BS EN 60068-2-27:1993:Ea BS EN 60068-2-27:2009 IEC 68-2-27:1987 DEF STAN 07-55:1983 Test A3 MIL-STD 810B:1967 Method 516 MIL-STD 810C:1975 Method 516.2 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003Method 516.5 MIL-STD 810G:2008 Method 516.6 MIL-STD 810G CN 1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.2 Shock (cont'd) **- with temperature (prefabricated enclosure)** Severity: 1 g to 210 g Duration: 1 ms to 70 ms (severity dependent) Max temp: +150 °C Min temp: -70 °C **- SRS** Limited by: 210g acceleration 50mm displacement	 BRB/RIA 20:1995 IEC 61373:1999 IEC 61373:2010 BS EN 50155:12.2.11:2007 BS EN 50155:13.4.11:2017 ETSI EN 300 19-2-1:2000 ETSI EN 300 019-2-1 v 2.3.1 (2017-11) ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015 NES 1004:1995 Data Sheet 28 DEF STAN 08-123:2000 Data Sheet 28 DEF STAN 08-123 Issue 2:2012 Data Sheet 28 MIL STD 810D:1983 Method 516.3 MIL-STD 810E:1989 Method 516.4 MIL-STD 810F:2003 Method 516.5 MIL STD 810G:2008 Method 516.6 MIL-STD 810G CN1:2014 Method 516.7 MIL-STD 810H:2019 Method 516.8	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2 DYNAMIC (cont'd) 1.2.3 Bump **- ambient temperature** Max item mass: 2000 kg **- with temperature (prefabricated enclosure)** Max item mass: 2000 kg Max temp: +150 °C Min temp: -70 °C	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M12 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M12 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M12 TR 2130C:2005 TR 2130D:2011 TR 2130E:2014 BS EN 60068-2-29:1993:Eb IEC 68-2-29:1987 DEF STAN 07-55:1983 Test A5 ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 ETSI EN 300 19-2-3:2003 ETSI EN 300 019-2-3:2015	P
	1.2.4 Drop and Topple **- with temperature (prefabricated enclosure)** Max item mass: 2000 kg Max temp: +150 °C Min temp: -70 °C	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M4 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M4 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M4 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS EN 60068-2-31:2008:Ec IEC 68-2-31:1969 ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 DEF STAN 07-55:1983 Test A4 BR 967:1973:Mechanical Environmental Clause 5.1	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** 1.2 DYNAMIC (cont'd) 1.2.5 Free Fall Impact Test **- with temperature (prefabricated enclosure)** Max drop ht: 4.5 m Max item mass: 8000 kg Max temp: + 150 °C Min temp: -70 °C	DEF STAN 00-35 Pt 3, Iss 3:1999 Test M5 DEF STAN 00-35 Pt 3, Iss 4:2006: Test M5 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M5 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014 BS EN 60068-2-31:2008 IEC 68-2-32:1975 ETSI EN 300 19-2-2:1999 ETSI EN 300 019-2-2 2013 DEF STAN 07-55:1983 Test A9	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 4 and 5	**1 ENVIRONMENTAL TESTS (NON-EXPLOSIVE ITEMS)** (cont'd) 1.2.11 Acceleration **- steady state** Max acceleration: 70 g Max radius: 1.22 m Max item mass: 22 kg (at max gn) Max item size: length 0.5 m width 0.3 m height 0.3 m	BS EN 60068-2-7:1993: Ga IEC 68-2-7:1983 BS 3G100: Part 2: Subsection3.6:1972(1983) DEF STAN 07-55:1983 Test A6 DEF STAN 00-35 Pt 3, Iss 3:1999 Test M13 DEF STAN 00-35 Pt 3, Iss 4:2006 Test M13 DEF STAN 00-035 Pt 3, Iss 5:2017 Test M13 MIL-STD 810B:1967 Method 513 MIL-STD 810C:1975 Method 513.2 MIL STD 810D:1983 Method 513.3 MIL-STD 810E:1989 Method 513.4 MIL-STD 810F:2003 Method 513.5 MIL-STD 810G:2008 Method 513.6 MIL-STD 810G CN1:2014 Method 513.7 MIL-STD 810H:2019 Method 513.8 RTCA DO 160B:1984 RTCA DO 160C:1989 RTCA DO 160D:1997 RTCA DO 160E:2004 RTCA DO 160F:2007 RTCA DO 160G:2010 RTCA DO 160G CHG1:2014	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
ENCLOSURES FOR ELECTRICAL EQUIPMENT	**2 INGRESS PROTECTION TESTS**		
	IP1X Protected against solid objects greater than 50 mm dia	BS EN 60529:1992 +A2:2013 EN 60529:1991 IEC 60529:1989 BS EN 60598-1:2008, Clause 9.2 Lloyds Register Specification No 1:1996: Enclosure test Lloyds Register Specification No 1:2013 Section 20 TR 2130C:2002 TR 2130D:2011 TR 2130E:2014	P
	IP2X Protected against solid objects greater than 12.5 mm dia		
	IP3X Protected against solid objects greater than 2.5 mm dia		
	IP4X Protected against solid objects greater than 1.0 mm dia		
	IP5X Dust protected		
	IP6X Dust tight		
	IPX1 Protected against dripping water		P
	IPX2 Protected against dripping water when tilted up to 15°		
	IPX3 Protected against spraying water		
	IPX4 Protection against splashing water		
	IPX5 Protected against water jets		
	IPX6 Protected against powerful water jets		
	IPX7 Protected against the effects of immersion		
	IPX8 Protected against submersion		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
AMUNITION EXPLOSIVES and PROPELLANTS FUZES: WEAPONS FIREARMS WEAPONS and SUB-ASSEMBLIES	**3 ENVIRONMENTAL TESTS (EXPLOSIVE ITEMS)** (UN Class 1 Hazard Divisions 1.3 and 1.4)		
	All tests in Section 1 and 2 may be carried out	See Sections 1 and 2	P
	Certain tests listed in Sections 1 and 2 can/may increase the potential hazard of the explosive item	Where necessary, prefabricated Standard Safety Cells are constructed for containment	
	The hazard classifications mentioned above (1.3 and 1.4) must not be violated before, during, or after testing		
	All tests in Section 1 and 2 may be carried out (cont'd)	See Sections 1 and 2	P
	Assurances that the item will remain potentially safe under the test conditions must be furnished by the customer		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
AEROSPACE STRUCTURES, MATERIALS AND EQUIPMENT AGRICULTURAL EQUIPMENT CONSTRUCTION PLANT, EQUIPMENT, PRODUCTS AND MATERIALS CRYOGENIC EQUIPMENT ELECTRICAL/ELECTRONIC COMPONENTS, CONNECTORS AND COMPONENTS ELECTRO-MECHANICAL DEVICES ENCLOSURES MARINE EQUIPMENT MECHANICAL PRODUCTS AND PLANT MINING EQUIPMENT AND COMPONENTS MOTOR VEHICLE ACCESSORIES AND COMPONENTS PACKAGES AND PACKAGING MATERIAL STRUCTURES AND COMPONENTS WELDMENTS	**4 MECHANICAL TESTS** 4.1 Structural Tests (a) Static (universal testing machines) Max force: 53 kN Max crosshead ht: 0.45 m (b) Static/low frequency (reaction frames) - ambient, high/low temp (prefabricated enclosures) Purpose built reaction frames Maximum specimen size: 4 m x 4 m x 3 m (high) Max single force: 500 kN (hydraulic actuators) Max temp: +70°C Min temp: -70°C Properties measured: - displacement mechanical strain	Documented In-House Procedure COP-015 COP-016 DEF STAN 00-970:1989 Part 2:Chapter 200 NES 1004:1995 Data Sheet 36 DEF STAN 08-123:2000 Data sheet 3 DEF STAN 08-123 Issue 2:2012 Data Sheet 36 DEF STAN 00-35 Pt 3, Iss3:1999 Tests M15, M16 and CL22 DEF STAN 00-35 Pt 3, Iss 4:2006 Tests M15, M16 and CL22 DEF STAN 00-035 Pt 3, Iss 5:2017 Tests M15, M16 and CL22 NES 1004:1995 Data Sheet 35 DEF STAN 08-123:2000 Data Sheet 35 DEF STAN 08-123 Issue 2:2012 Data Sheet 35 Lloyds Register Specification No 1:2013 Section 10 & 11	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	4 MECHANICAL TESTS (cont'd) 4.1 Structural Tests (cont'd)		
As listed on Page 28	**Fatigue Tests - Mechanical** sinusoidal, random, synthesised Purpose built reaction frame Maximum specimen size: 4 m x 4 m x 3 m (high) Max force: 53 kN Max freq: 10 Hz (force/stiffness dependent)	Documented In-House Procedure COP-015 DEF STAN 00-970:1989 Part 2: Chapter 201 COP-005 Hydraulic mechanical fatigue test procedure	P
	Endurance Tests - Mechanical Purpose-built rigs utilising pneumatic/hydraulic/electric actuators Measurement of: force - static and dynamic displacement strain frequency-cycles completed : at failure	Documented In-House Procedure COP-015 and COP-005 Hydraulic mechanical fatigue test method	P
JET ENGINE COMPONENTS INCLUDING GUIDE VANES; LOW, INTERMEDIATE AND HIGH-PRESSURE COMPRESSOR STAGES FOR COMMERCIAL AND MILITARY AIRCRAFT	High Cycle Fatigue Testing (HCF) Electromagnetic shaker, or air-jet excitation Frequency range: 50Hz to 3kHz	Documented In-house Procedure: COP-086	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	4 MECHANICAL TESTS (cont'd)		
HOSES, PIPES AND TUBES HYDRAULIC EQUIPMENT AND FITTINGS PRESSURE VESSELS	4.2 Pressure Tests (a) Hydraulic fatigue Max pressure : 22MPa (3200 lb/in^2) Cycle rate 2 to 600 cpm (b) Hydrostatic proof Max pressure: 60 MPa (8700 lb/in^2) c) Air pressure/vacuum Positive gauge pressure limit: 13.79 MPa (2000 lb/in^2) Negative gauge pressure limit: -96 kPa (-14 ib/in^2)	DEF STAN 00-35 Pt 3, Iss 3:1999 Test CL15 DEF STAN 00-35 Pt 3, Iss 4:2006 Test CL15 DEF STAN 00-035 Pt 3, Iss 5:2017 Test CL11 NES 1004:1995 Data Sheet 13 DEF STAN 08-123:2000 Data Sheet 13 DEF STAN 08-123 Issue 2:2012 Data Sheet 13 BS EN 60068-2-13:1999 COP-138 Hydraulic pressure fatigue testing COP-140 Pneumatic testing	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
ELECTRICAL/ELECTRONIC COMPONENTS and PRODUCTS	**5 ELECTRICAL OPERATION AND MEASUREMENT** Voltage: DC: 100 mV to 1000 V AC: 10 mV to 1000 V at 10 Hz AC: 100 mV to 10 V at 50 kHz Frequency: 1 Hz to 100 kHz Current: AC: 1 mA to 1000 A DC: 10 μA to 1000 A Resistance: 1 mΩ to 10 MΩ Insulation Resistance: 100 MΩ to 1 TΩ at 500 V 100 MΩ to 1 GΩ at 1 kV max Break detection (Contacts): 1 μS to 100 mS (max current: 100 mA)	Documented In-House Methods (as agreed with the client) TEP-10	P

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
ELECTRO-MECHANICAL and MECHANICAL PRODUCTS	**6 MECHANICAL OPERATION AND MEASUREMENTS** Torque: 1 lb-in to 500 lb-ft Air Pressure: 0 to 16,000 psi Vacuum: 100 mb to 1050 mb Internal Dimensions: 0.1 to 150 mm External Dimensions: 0.1 to 150 mm Weight: 1.00g to 12 kg	Documented In-House Methods (as agreed with the client) TEP-10	P
	SECTION 7 **VOID – NOT CURRENTLY IN USE**		
	SECTION 8 **VOID – NOT CURRENTLY IN USE**		
	SECTION 9 **VOID – NOT CURRENTLY IN USE**		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Aerospace Equipment Circuit Breakers/Switches Computers and Peripherals Domestic Appliances Electrical/Electronic Components Electrical/Electronic Connectors Electrical/Electronic Products Electric Cables Electronic Products: Digital Enclosures for Electrical Equipment Electrically Driven Wheelchairs Electro-Mechanical Devices Fans Fire Fighting and Detection Equipment Generators, Electrical Generators, Power Instruments, Indicating/ Recording IT Equipment Lamps, Electrical Luminaries Magnetic Materials Marine Equipment Measuring Equipment Medical Equipment Micro Electronic Circuits and Components Motors, Electrical Office Equipment: Electrical, Optical, and Photometric Equipment Plugs and Sockets: Electrical Printed Circuit Boards Power Supplies: Electrical Radio and TV Equipment Safety Appliances/ Equipment Security Devices and Alarms Telecoms Equipment Toys	**10 EMC TESTS** 10.1 CIVIL EMC TESTS 10.1.1 Conducted Emissions: Power Leads: 9 kHz to 30 MHz	EN 55011:2007+A1:2007 EN 55011:2009+A1:2010 EN 55011:2016 (excluding grid connect power converter equipment) AS/NZS CISPR 11:2004 EN 55013:2001+A1:2003+A2:2006 CISPR 13:2006 Edition 4.2 CISPR 13:2009 Edition 5.0 AS/NZS CISPR 13:2004 EN 55014-1:2006+A1:2009	A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G G G G G A,B,C,E,G,S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd)		
	10.1 CIVIL EMC TESTS (cont'd)	EN 55014-1:2006+A2:2011	A,B,C,E,G,S
		EN 55014-1:2017	A,B,C,E,G,S
		EN 55014-1:2021	A,B,C,E,G,S
		IEC CISPR 14-1 Ed 7.0 2020-09	A,B,C,G,S
		AS/NZS CISPR14.1:2010	A,B,C,E,G
	10.1.1 Conducted Emissions (cont'd)	EN 55015:2006+A1:2007+A2:2009	A,B,C,E,G
		EN 55015:2013	A,B,C,E,G
		CISPR 15:2009 Ed 7.2	A,B,C,E,G
		AS/NZS CISPR 15:2006	A,B,C,E,G
		EN 55016-2-1:2014 +A1:2017	A,B,C,E,G,S
		CISPR 16-2-1:2014 + Amd1:2017	A,B,C,E,G,S
		EN 55022: 1998	A,B,C,E,G
		EN 55022:2006 + A1:2007	A,B,C,E,G
		EN 55022:2010	A,B,C,E,G
		CISPR 22:1997	A,B,C,E,G
		CISPR 22:2006 Ed 5.2	A,B,C,E,G
		CISPR22: 2008	A,B,C,E,G
		AS/NZS CISPR 22:2006	A,B,C,E,G
		AS/NZS CISPR 22:2009+A1:2010	A,B,C,E,G
		CAN/CSA-CEI/ IEC CISPR 22:2002	A,B,C,E,G
		FCC CFR 47:Part 18	A,B,C,E,G,S
		FCC CFR 47:Part 15B	A,B,C,E,G,S
		ANSI C63.4:2003	A,B,C,E,G,S
		ANSI C63.4:2009	A,B,C,E,G,S
		ANSI C63.4:2014	A,B,C,E,G,S
		ANSI C63.4a:2017	
		ICES-001:Issue 4:2006	A,B,C,E,S
		ICES-003:Issue 2:2004	A,B,C,E,G,S
		ICES-003 Issue 5:2012	A,B,C,E,G,S
		ICES-003 Issue 6:2016	A,B,C,E,G,S
		ICES-003 Issue 7:2020	A,B,C,G,S
		ICES-005:Issue 3:2009	A,B,C,E
		VCCI V-3	A,B,C,G
		EN 60945:2002 Section 9.2	A,B,C,E,G
		EN 55032:2012	A,B,C,E,G,S
		EN 55032:2015	
		EN 55032:2015+AC:2016-07+A11:2020+A1:2020	
		CISPR 32:2015/COR1:2016/A11:2019/ A1:2019	A,B,C,E,G,S
		GEL210 11-14-0182	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd)		
	10.1 CIVIL EMC TESTS (cont'd)		
	10.1.2 Conducted Emissions:		
	Signal and Control Lines:		
	9 kHz to 30 MHz	EN 50065-1:1991	A,B,C
		EN 50065-1:1992	A,B,C
		EN 55011:2009+A1:2010	A,B,C,E,G,S
		EN 55011:2016 (excluding grid connect power converter equipment)	A,B,C,E,G,S
		EN 55014-1:2006+A1:2009 +A2:2011	A,B,C,E,G,S
		EN 55014-1:2017	A,B,C,E,G,S
		EN 55014-1:2021	A,B,C,E,G,S
		IEC CISPR 14-1 Ed 7.0 2020-09	A,B,C,E,G,S
		EN 55016-2-1:2014 +A1:2017	A,B,C,G,S
		CISPR 16-2-1:2014 + Amd1:2017	A,B,C,E,G,S
		EN 55022:1998[1]	A, B, C, G
		including ISDN ports where CDNs can be used	A,B,C,E,G
		EN 55022:2006 + A1:2007[1]	A,B,C,E,G
		CISPR 22:2006 Ed 5.2[1]	A,B,C,E,G,S
		CISPR 22:2008[1]	A,B,C,G,S
		AS/NZS CISPR 22:2006[1]	A,B,C,E,G,S
		AS/NZS CISPR 22:2009 +A1:2010	A,B,C,E,G,S
		EN 55032:2012	A,B,C,E,G,S
		EN 55032:2015	
		EN 55032:2015+AC:2016-07+A11:2020+A1:2020	
		CISPR 32:2015/COR1:2016/A11:2019/ A1:2019	A,B,C,E,G,S
		GEL210 11-14-0182	
		FCC CFR 47 Part 15B	A, B, C, G,S
		FCC CFR 47:Part 18	A, B, C, G,S
		VCCI V-3[1]	A,B,C,G
	30 MHz to 1 GHz	FCC CFR 47 Part 15B	G, B, S
		Section 15.111, 15.115 subpart b(1), b(2), (c), (h) & (i)	G, B
			G, B
	Antenna port 30 MHz to 2.15 GHz	EN 55013:2001+A1:2003+ A2:2006	G
		CISPR 13:2006 Edition 4.2	G
		CISPR 13:2009 Edition 5.0	G
		AS/NZS CISPR 13:2004	G
		EN 55032:2012	A,B,C,E,G,S
		EN 55032:2015	
		EN 55032:2015+AC:2016-07+A11:2020+A1:2020	
		CISPR 32:2015/COR1:2016/A11:2019/ A1:2019	
		GEL210 11-14-0182	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.3 Conducted Current Harmonics (Emissions): Measurements up to 40th Harmonic	EN 61000-3-2:2006 + A1:2009+ A2:2009 IEC 61000-3-2:2009 Ed 3.2 EN 61000-3-2:2014 EN IEC 61000-3-2:2019 + A1:2021 IEC 61000-3-2:2018/A1:2020	A,B,C,G,S A,B,C,G,S A,B,C G,S A,B,C,G,S A,B,C,G,S
	10.1.4 Conducted AC Mains Flicker (Emissions):	EN 61000-3-3:2008 EN 61000-3-3:2013 EN 61000-3-3:2013 +A1:2019 +A2:2021 IEC 61000-3-3:2008 Ed 2.0 IEC 61000-3-3 Amd1:2017 IEC 61000-3-3:2013/A2:2021	A,B,C,G,S A,B,C,G,S A,B,C,G,S A,B,C,G,S A,B,C,G,S A,B,C,G,S
	10.1.5 Radiated Emissions: Magnetic Field 9 kHz to 30 MHz	EN 55011:2007 + A2:2007 EN 55011:2009 + A1:2010 EN 55011:2016 (excluding grid connect power converter equipment) AS/NZS CISPR 11:2004 EN 60945:2002 Section 9.3 FCC CFR 47:Part 18 ICES-001:Issue4:2006	A,B C,E,G,S A,B C,E,G,S A,B,C,E,G,S A,B,C,E,G A,B C,E,G A,B C,E,G,S A,B C,E,G,S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.6 Radiated Emissions Electric Field 30 MHz to 18 GHz	EN 55011: 2009 + A1:2010 EN 55011:2016 (excluding grid connect power converter equipment) AS/NZS CISPR 11:2004 EN 55013:2001 including Amendment A1:2003 & A2:2006 CISPR 13:2006 Edition 4.2 CISPR 13:2009 Edition 5.0 AS/NZS CISPR 13:2004 EN 55014-1:2006 + A1:2009 EN 55014-1:2006+ A2:2011 EN 55014-1:2017 EN 55014-1:2021 IEC CISPR 14.1 Ed 7.0 2020-09 AS/NZS CISPR14.1:2010 EN 55015:2013 EN 55015:2006+A2:2009 EN 55015:2006 + A1:2007 + A2:2009 CISPR 15:2009 Ed 7.2 AS/NZS CISPR 15:2006 EN 55016-2-3:2017 EN 55016-2-3:2017 +A1:2019 CISPR 16-2-3:2016/A1:2019 EN 55022:1998 EN55022:2006 + A1:2007 EN55022:2010 CISPR 22:2006 Ed 5.2 CISPR 22:2008 Ed 6.0 AS/NZS CISPR 22:2006 AS/NZS CISPR 22:2009 AS/NZS CISPR 22:2009 +A1:2010 EN 60945:2002 Section 9.3 FCC CFR 47:Part 15B FCC CFR 47:Part 18 ANSI C63.4:2003 ANSI C63.4:2009 ANSI C63.4:2014 ANSI C63.4a:2017	A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G G G G G G A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.6 Radiated Emissions Electric Field (cont'd) 30 to 26.5GHz	ICES-003 Issue 5:2012 ICES-003 Issue 6:2016 ICES-003 Issue 7:2020 EN 55032:2012 EN 55032:2015 EN 55032:2015+AC:2016-07+A11:2020+A1:2020 CISPR 32:2015/COR1:2016/A11:2019/ A1:2019 GEL210 11-14-0182	A,B,C,E,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,E,G,S
	10.1.7 Interference Power Measurements 30 MHz to 1GHz	EN 55013:2001+ A1:2001+ A2:2006 CISPR 13:2006 Edition 4.2 CISPR 13:2009 Edition 5.0 AS/NZS CISPR 13:2004 EN 55014-1:2006+A1:2009 +A2:2011 EN 55014-1:2021 IEC CISPR 14-1 Ed 7.0 2020-09	G G G G A,B,C,G,S A,B,C,G,S
	10.1.8 Magnetic field emissions 10 kHz to 400 kHz	EN 50366:2003 + A1:2006 Time Domain Evaluation Method EN 62233:2008	G
	10.1.9 Electrostatic Discharge Immunity	EN 61000-4-2:2009 IEC 61000-4-2:2008 Ed 2.0 EN 55020:2002	A,B,C,E,G,S G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.10 Radio Frequency Susceptibility Magnetic Field DC and 10 Hz to 50 kHz 500 A/m	 EN 61000-4-8:2010 IEC 61000-4-8:2009 Ed 2.0 EN 61000-4-9:1994+ A1:2001 IEC 61000-4-9:2001 Ed 1.1	 A,B,C,G, S A,B,C,E, G A,B,C,G
	10.1.11 Radio Frequency Susceptibility Electric Field 14 kHz to 6 GHz 100 V/m maximum 10 kHz to 6 GHz Field uniformity: 0 to +6 dB for 1.5 m x 1.5 m plane using 75 % rule (10 kHz to 1 GHz) up to 20 V/m at 3 m (1 GHz to 6 GHz) up to 10 V/m at 3 m Stripline up to 10 V/m	 EN 61000-4-3:2006+A1:2008 EN 61000-4-3:2006 + A2:2010 IEC 61000-4-3:2006 Ed 3.0 IEC 61000-4-3:2008 Ed 3.1 IEC 61000-4-3:2010 Edition 3.2	 A,B,C,E, G,S

NOTE: Radiated Immunity Tests
These tests must normally be carried out in a screened enclosure, or other arrangements made to prevent contravention of the Wireless Communications Act.

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.12 Fast Transient/Burst Immunity: 0.25 kV to 5.0 kV (A,B,C) Up to 4kV (G) Positive and Negative Polarity 5 ns rise time 10 ns duration 15 or 75 ms burst duration	 EN 61000-4-4:2004 + A1:2010 EN 61000-4-4:2012 IEC 61000-4-4:2004 Ed 2.0 EN 55020:2002 Documented Element Procedure STP-1009 Electrical Fast Burst Transient	 A,B,C,E,G,S G A,B,C,E
	10.1.13 Surge Immunity Waveforms: 0.2 kV to 6.6 kV (A,B,C) up to 6 kV/3 kA (G) 1.2/50 (8/20) μs Common mode Differential mode 10/700 μs (up to 7 kV) (G)	 EN 61000-4-5:2006 EN 61000-4-5:2014 ITU-T K20:2003 ITU-T K21:2000 ITU-T K21:2003 ITU-T K44:2000 ITU-T K44:2003	 A,B,C,E,G,S G G G G G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.14 Conducted Susceptibility CW, Transients and Magnetic Field: 20 Hz to 230 MHz, 20 V rms Broadband impulsive conducted disturbances applied to xDSL ports	 EN 61000-4-6:2009 IEC 61000-4-6:2008 Ed 3.0 EN 61000-4-6:2014 EN 55035:2017 +A11 2020 CISPR 35:2016	 A,B,C,E,G,S A,B,C,G,S A,B,C,G
NOTE: Conducted Immunity Tests These tests must normally be carried out in a screened enclosure, or other arrangements made to prevent contravention of the Wireless Communications Act.			
Coating, Metallic Composite Materials	10.1.15 Voltage Dips, Interruptions and Voltage Variations	EN 61000-4-11:2004 EN 61000-4-11:2020 IEC 61000-4-11:2004 Ed 2.0 IEC 61000-4-11:2020 Ed 3.0	A,B,C,G,S
	10.1.16 Site Surveys Conducted Emissions Radiated E-Field Radiated H-Field	Documented Element Procedures STP-1004 Power Line Conduction STP-1005 Magnetic Field (H) Emissions STP-1006 E-Field Emissions Testing	E
	10.1.17 VOID		
	10.1.18 Compass Safe Distance	EN 60945:2002 Section 11.2	A, C

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd)		
	10.1 CIVIL EMC TESTS (cont'd)		
	10.1.19 EMC Tests These Generic and Product specific standards are included in this schedule, but limited to those referred basic standards that are explicitly listed in Sections 10.1.1 to 10.1.15. Note: International Standards, EN, ENV and IEC, listed in this Schedule, that have been adopted nationally as BS EN DD ENV and BS IEC and are technically identical, can be considered as being included in this Schedule.	EN 12184:2006	A,B,C,E
		EN 50121-1:2015	A,B,C,E,G
		EN 50121-2:2015	A,B,C,E,G
		EN 50121-3-1:2015	A,B,C,E,G
		EN 50121-3-2:2015	A,B,C,E,G
		EN 50121-4:2015	A,B,C,E,G
		EN 50121-5:2015	A,B,C,E,G
		EN 50121-1:2017	A,B,C,E,G
		EN 50121-2:2017	A,B,C,E,G
		EN 50121-3-1:2017	A,B,C,E,G
		EN 50121-3-2:2016	A,B,C,E,G
		EN 50121-4:2016	A,B,C,E,G
		EN 50121-5:2017	A,B,C,E,G
		EN 50121-3-2:2016 + A1:2019	A,B,C,G
		EN 50130-4:2011	A,B,C,E,G
		EN 50130-4:2011 + A1:2014	
		EN 50131-2-3:2008	A,B,C,E,G
		EN 50131-2-4:2008	A,B,C,E,G
		EN 50131-2-5:2008	A,B,C,E,G
		EN50131-2-6:2008	A,B,C,E,G
		EN 50131-4:2009	A,B,C,E,G
		DD CLC/TS EN 50131-7:2010	A,B,C,E,G
		10/30227151DC (EN50131-9:2010)	A,B,C,E,G
		EN 50131-1:2006 + A1: 2009	A,B,C,E,G
		08/30179399 DC (EN50131-1)	A,B,C,E,G
		EN 50131-2-2:2008	A,B,C,E,G
		EN 50131-3:2009	A,B,C,E,G
		EN 50270:2006	A,B,C,E
		EN 50270:2015	A,B,C,E
		EN 50293:2012	A,B,C,E,G
		EN 50165:1997 + A1:2001 Sections 19.101.1 to 19.101.8	A,B,C,E
		EN 50199:1995	A,B,C,E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.19 EMC Tests (cont'd) Note: International Standards, EN, ENV and IEC, listed in this Schedule, that have been adopted nationally as BS EN DD ENV and BS IEC are technically identical, can be considered as being included in this schedule.	EN 55014-2:1997+ A1:2001 EN 55014-2:1997+A2:2008 EN 55014-2:2015 EN 55014-2:2021 CISPR 14-2:2020 EN 55020:2007 + A11:2011 + A12:2016 For the testing of LNB only ESD and Stripline Tests. EN 55024:2010 CISPR 24: 2010 Ed 2.0 EN 55024:2010 + A1:2015 EN 55035:2017 +A11:2020 CISPR 35:2016 EN55103-1:2009[1] [1]excluding TV and video products EN55103-2:2009 BS IEC 60533:1999 IEC 60533:2015 IEC 60601-1-2:2007 Ed 3.0 EN 60601-1-2:2007 IEC 60601-1-2:2014 Ed 4 EN 60601-1-2:2015 IEC 60601-1-2 Edition 4.1 (2020/09) EN 60601-1-2:2015 & A1:2021 IEC / EN 60601-1-11:2015 IEC / EN 60601-1-12:2015 EN 61000-6-1:2007 EN 61000-6-1:2019 excluding EN 61000-4-34 EN 61000-6-2:2005 EN 61000-6-2:2019 excluding EN 61000-4-34 EN 61000-6-3:2007 EN 61000-6-3:2007+A1:2011 IEC 61000-6-3:2011 Ed 2.1 EN 61000-6-4:2007 EN 61000-6-4:2007+A1:2011 IEC 61000-6-4:2011 Ed 2.1 EN 61204-3:2001	A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,G,S A,B,C,G,S A,B,C,E,G A,B,C,E A,B,C,E,G A,B,C,E,G A,B,C,E,G A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.19 EMC Tests (cont'd) Note: International Standards, EN, ENV and IEC, listed in this Schedule, that have been adopted nationally as BS EN DD ENV and BS IEC are technically identical, can be considered as being included in this schedule.	EN 61326-1:2013 EN IEC 61326-1:2021 EN 61326-2-1:2013 EN IEC 61326-2-1:2021 EN 61326-2-2:2013 EN IEC 61326-2-2:2021 EN 61326-2-3:2013 EN IEC 61326-2-3:2021 EN 61326-2-4:2013 EN IEC 61326-2-4:2021 EN 61326-2-5:2013 EN IEC 61326-2-5:2021 EN 61326-2-6:2013 EN IEC 61326-2-6:2021 EN 61326-3-1:2017 EN 61326-3-2:2018 EN 61547:2009 EN 61800-3:1996 excluding "walkie talkie" tests BS IEC 62003:2009 excluding testing to EN 61000-4-10:1993 EN 61000-4-13:2002 EN 61000-4-14 (undated ref) EN 61000-4-12:2006 EN 61000-4-16 EN 61000-4-28 Lloyds Register Test Specification No.1:1990 EN 300 386 V1.5.1 EN 300 386-2:1997 EN 300 386 V1.6.1:2012	A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,G,S S S A,B,C,E,G A,B,C,E A,B,C,E A,B,C,E B,G B,G A,B,C,D,E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.19 EMC Tests (cont'd) Note: International Standards, EN, ENV and IEC, listed in this Schedule, that have been adopted nationally as BS EN DD ENV and BS IEC and are technically identical, can be considered as being included in this Schedule.	EN 301 489-1 V1.8.1:2008 EN 301 489-1 V1.9.2:2011 EN 301 489-1 V2.1.1:2016 EN 301 489-1 V2.2.3 (2019-11) excluding EN 61000-4-34 EN 301 489-2:V1.3.1:2002 EN 301 489-3:V1.6.1:2013 EN 301 489-3:V2.1.1:2019 EN 301 489-3:V2.3.2:2023 EN 301 489-4 V1.4.1:2009 EN 301 489-5:V1.3.1:2002 EN 301 489-6 V1.3.1:2008 EN 301 489-7 V1.3.1: 2005 EN 301 489-8 V1.2.1:2002 EN 301-489-9 V1.4.1:2007 EN 301 489-10 V1.3.1:2002 EN 301 489-11 V1.3.1:2006 EN 301 489-12 V2.2.2:2008 EN 301 489-13 V1.2.1:2002 EN 301 489-14 V1.2.1:2003 EN 301 489-15 V1.2.1:2002 EN 301 489-16 V1.2.1:2002 EN 301 489-17 V3.3.1:2024 EN 301 489-17 V3.2.4:2020 EN 301 489-17 V3.1.1:2017 EN 301 489-17 v2.2.1:2012 EN 301 489-18 V1.3.1:2002 EN 301 489-19 V2.2.1:2022 EN 301 489-19 V1.2.1:2002 EN 301 489-20 V1.2.1:2002 EN 301 489-23 V2.2.3:2019 EN 301 489-24 V1.5.1:2010 EN 301 489-28 V1.1.1:2004 EN 301 489-33 V2.2.1:2019 EN 301 489-33 V2.1.1:2016 EN 301 489-52 V1.2.1:2011 EN 60945:2002 Section 10	A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S A,B,C,E,G,S B,G,S A,B,C,E,G,S B,G,S A,B,C,E,G,S B,G,S B,G,S B,G,S A,B,C,E,G,S B,G,S A,B,C,G,S A,B,C,G,S A,B,C,G,S A,B,C,G,S B,G,S B, G, S B,G,S B,G,S S B,G,S B,G S S S A,B,C,E,G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.1 CIVIL EMC TESTS (cont'd) 10.1.20 Site testing The in house procedures indicate how various test methods may be implemented on a customer site. All procedures at version 3 June 2015	STP-1001 Site Safety Procedures STP-1002 Initial Site Survey(s) and Test Plan(s) STP-1003 Equipment Verification STP-1004 Power Line Conduction STP-1005 Magnetic Field (H) Emissions STP-1006 E-Field Emissions Testing STP-1007 Radiated Immunity Using Licensed Transmitters STP-1008 Conduced Immunity Testing as per EN61000-4-6 2009 STP-1009 Electrical Fast Burst Transient Testing as per EN6100-4-4 2004 STP-1010 Voltage Surge Testing as per EN61000-4-5 2006 STP-1011 Electrostatic Discharge Testing as per EN61000-4-2 2009 STP-1012 Voltage Dips and Interruptions STP-1013 Voltage Fluctuations and Flicker Testing	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS 10.2.1 Conducted Emissions: Power, Control and Signal Leads: DC to 400 MHz Antenna Terminals 10 kHz to 18 GHz	BS 3G100 Part 4 Section 2:1980 RTCA/DO-160B:1988 RTCA/DO-160C:1989 RTCA/DO-160 D E, F G Section 21 RTCA/DO-160E Section 21 RTCA/DO-160F Section 21 MVEE 595:1970 DGS 250B:1981 SP-P-90003 Issue 3:1970 MIL STD 461 B:1980 MIL STD 462:1967 MIL STD 461C, CE01, CE02, CE101, CE102, CE03 and CE04 DEF STAN 59-41:Issue 3 and 5 DCE01 and DCE02 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999, DCE01 and DCE 02 Def Stan 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DCE01 and DCE 02 Def Stan 59-411 Part 3 Issue 3: 2019 DCE01, DCE02 and NCE06 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCE01, DCE02 and DCE03 MIL STD 461D, E and F and G CE101, CE 102 and CE106 DEF STAN 59-411:Part 4:2007 Inc A1 DCE01 and DCE02 EuroFighter SPE-J-000-E-1000 CE-EFA-1, CE-EFA-2, CE-EFA-3 AECTP-500 Edition 4: 2011 (Category 501 & 502) NCE01, NCE02, NCE03, NCE05 and NCE05.2	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	10 **EMC TESTS** (cont'd)	AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502)	
	10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd)	NCE01, NCE02, NCE03, NCE05 and NCE05.2	
	10.2.2 Radiated Emissions: Electric Field: 20 Hz to 18 GHz	BS 3G100 Part 4 Section 2:1980 MVEE 595:1970 DGS 250B:1981 SP-P-90003 Issue 3:1970 NWS 3:1991 MIL STD 461B:1980 MIL STD 461C:1986 MIL STD 461C, RE02 MIL STD 461D, E,F and G , RE102, and RE103 MIL STD 462:1967	A, C, E
		DEF STAN 59-41:1988 Issue 2 DEF STAN 59-41:1988 Part 3 iss 3 EuroFighter SPE-J-000-E-1000 RE-EFA-1 DEF STAN 59-41:1993 Part 3 iss 1 DRE01, DRE02 and DRE03 DEF STAN 59-41:1998 Part 4 iss 2 DEF STAN 59-41:Issue 3 and 5, DRE01 and DRE03 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DRE01 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DRE01.3 and DRE03.3 Def Stan 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DRE01 and DRE03 Def Stan 59-411 Part 3 Issue 3: 2019 DRE01, DRE03 and NRE03 RTCA/DO160B:1988 RTCA/DO160C, D,E, F, G Section 21 DEF STAN 59-411 Part 3 DRE01 and DRE03	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.2 Radiated Emissions: Electric Field: 20 Hz to 18 GHz (cont'd)	DEF STAN 59-411:Part 4:2007 inc A1 DRE01, DRE03 and DRE04 AECTP-500 Edition 4: 2011 (Category 501 & 502) NRE02, NRE02.2 and NRE03 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NRE02, NRE02.2 and NRE03	
	10.2.3 Radiated Emissions: Magnetic Field: 20 Hz to 30 MHz	MIL STD 461C, RE01, RE04 MIL STD 461D, E, F and G RE101 DEF STAN 59-41:1998 Issue 3 DEF STAN 59-41:Issue 3 and 5, DRE02 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DRE02.3 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DRE02 Def Stan 59-411 Part 3 Issue 3: 2019 DRE02 AECTP-500 Edition 4: 2011 (Category 501 & 502) NRE01 and NRE01.2 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NRE01 and NRE01.2	A, C, E
	10.2.4 Exported Transients Power Lines	DEF STAN 59-41:Issue 3 and 5, DCE03 DEF STAN 59-41 Part 3 Iss 1:1993 DCE03 EuroFighter SPE-J-000-E-1000 CE-EFA-3 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCE03.3 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DCE03	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.4 Exported Transients Power Lines (cont'd)	Def Stan 59-411 Part 3 Issue 3: 2019 DCE03 AECTP-500 Edition 4: 2011 (Category 501) NCE04 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NCE04	A, C, E
	10.2.5 Radiated Susceptibility: Electric Field: 14 kHz to 18 GHz Maximum Field Strength: 200 V/m	BS 3G100 Part 4 Section 2:1980 Bureau Veritas Part III:1991 Chapters 19 - 25, Clause 8 MIL STD 461B:1980 MIL STD 461C, RS03 MIL STD 461D, E, F, and G RS103 MIL STD 462:1967 DEF STAN 59-41:Issue 3 and 5, DRS02 DEF STAN 59-41 Part 3 Iss 1:1993 DRS02 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DRS02 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DRS02.3 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DRS02 Def Stan 59-411 Part 3 Issue 3: 2019 DRS02 RTCA/DO-160B, C, D, E, F, G Sections 19, 20 and Change Notice 2 BOEING D6-16050:para 7.3 DEF STAN 59-411:Part 4:2007 Inc A1 Low Level Swept Current	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.5 Radiated Susceptibility: (cont'd)	DEF STAN 59-411:Part 4:2007 Inc A1 DRS02 DGS 250B:1981 MVEE 595:1970 NWS 3:1981 EuroFighter SPE-J-000-E-1000 RS-EFA-2, RS EFA-3 SP-P-90003 Issue 3:1970 AECTP-500 Edition 4: 2011 (Category 501 & 502) NRS02 and NRS02.2 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NRS02 and NRS02.2	
	HIRF The following levels have been demonstrated: 400 MHz to 1 GHz 700 V/m 1 GHz to 1.6 GHz 4000 V/m 1.6 GHz to 2 GHz 5000 V/m 2 GHz to 6 GHz 7000 V/m 6 GHz to 8 GHz 2500 V/m 8 GHz to 12 GHz 6000 V/m 12 GHz to 18 GHz 4000 V/m Levels up to 8000 V/m in restricted bands	Section 20.5 RTCA/DO 160F & G DEF STAN 59-41/411 Issues 1 & 2 DRS02,B	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd)		
	10.2.6 Radiated Susceptibility: Magnetic Field: 20 Hz to 100 kHz Maximum Field Strength: 170 dBT	MIL STD 461C, RS01 and RS02 MIL STD 461D, E, F and G RS101 EN61000-4-39:2017 (30 kHz, 134.2 kHz and 13.56 MHz only) IEC 61000-4-39:2017 (30 kHz, 134.2 kHz and 13.56 MHz only) DEF STAN 59-41 Part 3 Iss 1:1993 DRS01 DEF STAN 59-41:1988 Issue 3 DEF STAN 59-41:Issue 3 and 5, DRS01 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DRS01.3 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DRS01 Def Stan 59-411 Part 3 Issue 3: 2019 DRS01 RTCA/DO-160D, E, F and G Section 19 EuroFighter SPE-J-000-E-1000 RS-EFA-1 AECTP-500 Edition 4: 2011 (Category 501 & 502) NRS01 and NRS01.2 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NRS01 and NRS01.2	A, C, E A, C, E, G
	10.2.7 Magnetostatic Field Susceptibility	DEF STAN 59-41:1988 Issue 3 DEF STAN 59-41 Part 3 Iss 1:1993 DMFS01 DEF STAN 59-41:Issue 3 and 5, DMFS01 and DRS03 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DRS03	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	10 EMC TESTS (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.7 Magnetostatic Field Susceptibility (cont'd)	DEF STAN 59-411:Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DRS03 Def Stan 59-411 Part 3 Issue 3: 2019 DRS03 AECTP-500 Edition 4: 2011 (Category 501) NRS04 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NRS04	A, C, E
	10.2.8 Conducted Susceptibility: Inter and Cross Modulation and Rejection of Unwanted Signals: 10 kHz to 20 GHz	MIL STD 461D, E,F and G CS103, CS104 and CS105 Def Stan 59-411 Part 3 Issue 3: 2019 NCS03, NCS04 and NCS05 AECTP-500 Edition 4: 2011 (Category 501) NCS03, NCS04 and NCS05 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NCS03, NCS04 and NCS05	A, C
	10.2.9 Conducted Susceptibility: Structure Current	MIL STD 461 G CS 109 AECTP-500 Edition 4: 2011 (Category 501) NCS06 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NCS06	A, C

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.10 Conducted Susceptibility: Power, Control and Signal Lines including Bulk Current Injection 20 Hz to 400 MHz Maximum current: 2 A	BS 3G100 Part 3:1979 Bureau Veritas Part III:1991 Chapters 19 - 25, Clause 9 MIL STD 461B:1980 MIL STD 461C, CS02 MIL STD 461D, E,F and G CS114 MIL STD 462:1967 DEF STAN 59-41:1998 Issue 3 DEF STAN 59-41:Issue 3 and 5, DCS02 and DCS03 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DCS02 and DCS03 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCS02, DCS03 DEF STAN 59-41 Part 3:Iss 1:1993 DCS02 DEF STAN 59-41 Part 3 Section 3 Issue 1:2003 DCS02.3 and DCS03.3 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DCS02 and DCS03	A, C, E A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.10 Conducted Susceptibility: (cont'd)	Def Stan 59-411 Part 3 Issue 3: 2019 DCS02 and DCS03 AECTP-500 Edition 4: 2011 (Category 501 & 502) NCS02, NCS07 and NCS07.2 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NCS01, NCS02, NCS07 and NCS07.2 RTCA/DO-160B, C, D, E F and G Sections 18, 19, 20 and Change Notice 2 DEF STAN 59-411:Part 4:2007 Inc A1 High level bulk current injection DGS 250B:1981 EuroFighter SPE-J-000-E-1000 CS EFA-2 SP-P-90003 Issue 3:1970 TS 1527 Issue 2:1976	A, C, E
	10.2.11 Conducted Susceptibility Transients	MIL STD 461C, CS06 MIL STD 461D, E,F and G CS115 and CS116 DEF STAN 59-41:Issue 3 and 5, DCS04, DCS05, DCS06, DCS07 and DCS08 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DCS05 and DCS06 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCS04, DCS05, DCS06, DCS08 and DCS12 DEF STAN 59-411 Part 3 inc A1 Def Stan 59/411 Part 3 iss 2:2014 DCS04, DCS05, DCS06, DCS08, DCS09 and DCS12	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.11 Conducted Susceptibility Transients (cont'd)	Def Stan 59-411 Part 3 Issue 3: 2019 DCS04, DCS05, DCS06 DCS08, DCS09 and DCS12 DEF STAN 59-411:Part 4:2007 Inc A1 DCS05 and DCS06 RTCA/DO-160C, D, E F and G Sections 17 and 19 EuroFighter SPE-J-000-E-1000 CS-EFA-4 MIL-STD-704E & F Inc Notice 1 MIL HNBK 704-1 to 8 AECTP-500 Edition 4: 2011 (Category 501) NCS08, NCS09, NCS10, NCS11 and NCS13 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NCS08, NCS09, NCS10, NCS11 and NCS13	A, C, E
	10.2.12 Conducted Susceptibility: Primary Power Lines, 20 Hz - 50 kHz	MIL STD 461D, E and F CS101 MIL STD 461C, CS01 DEF STAN 59-41:Issue 3 and 5, DCS01 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DCS01 DEF STAN 59-411:Part 4:2007 Inc A1 DCS01 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCS01 Def Stan 59-411 Part 3 inc A1 DCS01	A, C

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.12 Conducted Susceptibility (cont'd): Primary Power Lines, 20 Hz - 50 kHz	Def Stan 59-411 Part 3 Iss 2: 2014 DCS01 Def Stan 59-411 Part 3 Issue 3: 2019 DCS01 RTCA/DO-160C, D, E ,F and G Section 18 EuroFighter SPE-J-000-E-1000 CS-EFA-1 AECTP-500 Edition 4: 2011 (Category 501) NCS01 AECTP-500 Edition E, Ver. 1: 2016 (Category 501) NCS01	A, C
	10.2.13 Electrostatic Discharge	DEF STAN 59-41:Issue 3 and 5, DCS10 DEF STAN 59-41:Part 3 Issue 5 DCS10 DEF STAN 59-41:Part 3, Section 2, Issue 2:1999 DCS10 DEF STAN 59-41 Part 3, Section 3, Issue 1:2003 DCS10.3 DEF STAN 59-411 Part 3 Def Stan 59/411 Part 3 iss 2:2014 DCS10 Def Stan 59-411 Part 3 Issue 3: 2019 DCS10 RTCA/DO-160B, C, D, E , F and G Section 25 DEF STAN 59-41:Part 3, Section 3, Issue 1:2003 DCS10 MIL STD 461 G CS 118	A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.2 MILITARY AND AEROSPACE EMC TESTS (cont'd) 10.2.13 Electrostatic Discharge (cont'd)	AECTP-500 Edition 4: 2011 (Category 501 & 502) NCS12 and NCS12.2 AECTP-500 Edition E, Ver. 1: 2016 (Category 501 & 502) NCS12 and NCS12.2	A, C
	10.2.14 Compass Safe Distance	BS 3G100 Part 2, Section 2:1972 RTCA/DO-160B, C, D, E F and G Section 15 IATA Packing Instruction 902:1999	A, C
	10.2.15 Power Input Checks and 28 V DC Electrical Systems in Military Vehicles	DEF STAN 61-5 Part 6: Issue 4:1984 DEF STAN 61-5:Part 6: Issue 5:1990 DEF STAN 61-5 Part 6: Issue 6:2009 Vehicle testing Det 01A, Det 02A, Det 03A, Det 04A, Det 05A, Det 06A, Det 07A, Det 08A Dit 01A, Dit 02A, Dit 03A, Dit 04A Platform and Terminal Equipment testing DET01.B, DET02.B, DET03.B DIT01.B, DIT02.B, DIT03.B DIT04.B, DIT05.B, DIT06.B DIT07.B, DIT08.B, DIT01.B MIL STD 1275B, C, D E and F RTCA/DO-160C, D, E, F and G Section 16	A, C

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd)		
	10.2 MILITARY AND AEROSPACE EMC TESTS		
	10.2.16 Lightning Effects	RTCA/DO-160C, D, E, F and G Section 22	A, C, E, K
		MIL STD 461 G CS 117	A, C, E
		MIL STD 461 G CS 117 (excluding waveform 6)	K
		BOEING D6-16050:Section 7.4	A, C, E
		Def Stan 59-113 issue 3:2019 (Annex H and Annex I section 4 only (excluding damped sinusoidal waveforms)	A, C, E
	Damage (Cat a, B & C) and functional upset (Cat D & E) testing (multiple stroke/burst)	Airbus ABD0100.1.2 Issue G Section 3.2.2	A, C
	10.2.17 Ground Reference Fluctuation	Airbus ABD0100.1.2 Issue G Section 3.4.6	A, C
	10.3 AUTOMOTIVE EMC TESTS		
	10.3.1 Conducted and Radiated Emissions 9 kHz to 18 GHz Components/ESA (whole vehicle only at Location A)	CISPR 12:2001	A, C
		CISPR 25:2002	
		2004/104/EC, Annexes IV, V, VII and VIII	
		2005/83/EC	
		EN50498:2010	
		72/245/EEC	
		97/24/EEC Chapter 8	
		2009/64/EC	
		ECE Regulation 10.04	
		ECE Regulation 10.05 +Amd1	A, C, E
		ECE Regulation 10.06	A, C, E
		EN 13309:2010	A, C, E
		ISO 14982:2009	
		EN ISO13766-1:2018	A, C, E
		EN ISO 13766-2:2018	
		EN 13766:2006	A, C, E
		EN 12895:2015+A1:2019	
	Excluding vehicle antenna port emissions	[1]EN 55025:2008	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.3 AUTOMOTIVE EMC TESTS (cont'd) 10.3.2 Radiated Immunity Absorption Chamber 400 MHz - 10 GHz at 200 V/m Components / ESA (whole vehicle only at Location A)	ISO 11452-1:2005+A1:2008 ISO 11452-2:2004, substitution method ISO 11451-1:2005+A1:2008 ISO 11451-2:2005 ISO 11451-2:2015 ISO 11451-4:2013 2004/104/EC Annexes VI, IX 2005/83/EC EN50498:2010 72/245/EEC 97/24/EEC Chapter 8	A, C
	10.3.2 Radiated Immunity Absorption Chamber 400 MHz - 10 GHz at 200 V/m Components / ESA (whole vehicle only at Location A) (cont'd)	2009/64/EC ECE Regulation 10.04 ECE Regulation 10.05 + Amd1 ECE Regulation 10.06 EN 13309:2010 ISO 14982:2009 EN ISO 13766-1:2018 EN ISO 13766-2:2018 EN 13766:2006 ISO 11452-1:2015	A, C A, C, E A, C, E A, C, E A, C, E A, C, E A, C, E
	10.3.3 Conducted Immunity BCI 1 MHz to 400 MHz	ISO 11452-1:2005 ISO 11452-4:2005, substitution method 2004/104/EC Annexes IX 2005/83/EC EN50498:2010 72/245/EEC 97/24/EEC Chapter 8 2009/64/EC ECE Regulation 10.04 ECE Regulation 10.05 + Amd1 ECE Regulation 10.06 EN 13309:2010	A, C A, C, E A, C, E A, C, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 33	**10 EMC TESTS** (cont'd) 10.3 AUTOMOTIVE EMC TESTS (cont'd) 10.3.3 Conducted Immunity BCI 1 MHz to 400 MHz (cont'd)	ISO 14982:2009 EN 13766:2006 EN ISO 13766-1:2018 EN ISO 13766-2:2018 ISO 11452-1:2015 ISO 11452-4:2011 (excludes TWC)	 A, C, E A, B, C, E A A
	10.3.4 Vehicular Transient Testing 12 and 24 V Emissions and Immunity Components/ESA (whole vehicle only at Location A) [1]Excluding ICC method	ISO 7637-1:1990 ISO 7637-2:1990 ISO 7637-2:2004, pulses 1, 2a, 2b, 3a, 3b and 4 only ISO 16750-2:2012 Section 4.6.3 (starting profile) and 4.6.4 (load dump) 2004/104/EC Annexes X 2005/83/EC EN50498:2010 72/245/EEC 97/24/EEC Chapter 8 2009/64/EC ECE Regulation 10.04 ECE Regulation 10.05 + Amd 1 ECE Reulation 10.06 EN 13309:2010 ISO 14982:2009 EN 13766:2006 EN ISO 13766-1:2018 EN ISO 13766-2:2018 ISO 7637-1:2015 ISO 7637-2:2011 [1]ISO 7637-3:2007 [1]ISO 7637-3:2016	A, C A,C,E A,C, E A, C, E A, C A A, C
	10.3.5 Electrostatic Discharge Immunity Positive and Negative Polarity (ESD) Up to 20 kV Direct and Indirect Air and Contact Discharge	ISO 10605:2008 ISO 10605 +A1:2014	A, C A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS		
Audio, Video and similar Electronic Apparatus	Electrical Safety	EN 60065: 2014 (Withdrawn) Excluding: 6.2 (laser radiation test) 8.22 (thin sheet insulation test) 12.3 (cable connected remote control devices) 12.5 (coax sockets, including on TV receivers) 14 (components) 18 (cathode ray tubes)	E, F
Household and Similar Electrical Appliances	Electrical Safety	EN 60335-1:2012+A11:2014 + A13 2017 IEC 60335-1-2010, IEC 60335-1-2010+Am1:2013, IEC 60335-1-2010+Am2:2016 Excluding: 15.1 (ingress protection) 22.32 (rubber-aging test) 22.48 (backsiphonage test) 24.1 (component tests) 24.7 (hose-set tests)	E, F
Household and Similar Electrical Appliances	Electrical Safety	EN 60335-1:2023 + A11:2023, IEC 60335-1: 2020 Excluding: 15.1 Ingress protection, 22.16 Automatic cord reels, 22.32 Rubber-aging test, 22.48 Back siphonage test, 24.1 Component tests, 24.7 Hose-set tests, 32.2 Optical radiation hazards, Annex F Capacitors, Annex H Switches & Annex T UV-C radiation effect on non-metallic material.	E, F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Household and Similar Electrical Appliances	Electrical Safety	Only Clause 15.1 (ingress protection)	B
Vacuum cleaners and water-suction cleaning appliances	Electrical Safety	EN.60335-2-2 2010 IEC 60335-2-2:2009+Am.2:2016 Excluding: current carrying hoses	E, F
Skin or Hair Care Appliances (excluding heated curlers, helmet type, flexible hood, fixed hairdryers and those with a swivel cord connector)	Electrical Safety	IEC 60335-2-23:2016+Am.1:2019	E, F
Battery chargers	Electrical Safety	EN 60335-2-29:2004 + A2:2010 Excluding: Clause 15.1 (moisture resistance)	E, F
Floor treatment machines for commercial use	Electrical Safety	EN 60335-2-67: 2012 IEC 60335-2-67:2012+Am.1:2016 Excluding: Current carrying hoses)	E, F
Spray extraction machines, for commercial use	Electrical Safety	EN.60335-2-68: 2012 IEC 60335-2-68:2012+Am.1:2016	E, F
Wet and dry vacuum cleaners, including power brush, for commercial use	Electrical Safety	EN.60335-2-69: 2012 IEC 60335-2-69:2016 Excluding: (Current carrying hoses)	E, F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Automatic machines for floor treatment for commercial use	Electrical Safety	EN.60335-2-72: 2012	E, F
High pressure cleaners and steam cleaners	Electrical Safety	IEC 60335-2-79: 2012 IEC 60335-2-79:2016 Particular requirements for high pressure cleaners and steam cleaners Excluding: 11.101 Temperature of flue gases 19.101 oil fired and gas fired machines 19.102 downdraft pressure of oil fired and gas fired machines Annex AA Requirements to avoid backsyphonage	F
Fans	Electrical Safety	EN 60335-2-80:2003 + A1:2004 + A2: 2009	E, F
Service and Amusement Machines (excluding Kiddie Rides and equipment intended for outdoor use)	Electrical Safety	EN 60335-2-82:2003 + A1: 2008 IEC 60335-2-82:2002 + A1:2008 + A2:2015	E, F
Particular requirements for cosmetic and beauty care appliances incorporating lasers and intense light sources	Electrical Safety	IEC 60335-2-113:2016/AMD1:2021 IEC 60335-2-113:2016 Excluding: Clauses 22.108 and 32.101 (Testing to IEC 60825-1) Clauses 22.109 and 32.102 (Testing to IEC 62471)	E, F
Particular requirements for the safety of appliances for the generation of directly inhalable aerosols	Electrical Safety	IEC 60335-2-120:2024	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Information Technology Equipment	Electrical Safety	IEC 60950-1:2005 + A1:2009 + A2:2013 (Withdrawn) EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 +A2:2013 (Withdrawn) Excluding: 4.2.8 (CRTs) 4.3.13 (lasers) Annex U (insulated winding wire) Annex Y (UV conditioning) Annex AA (mandrel test) Annex CC (IC current limiters) AS/NZS 60950.1:2003 AS/NZ 60950.1:2011	E, F
Information Technology Equipment Equipment Installed Outdoors	Electrical Safety	IEC 60950-22:2016 EN 60950-22:2017 Excluding: Clause 7: Wiring terminals, relating to IEC 60364 Clause 8.2: Resistance to UV relating to Table 1 Clause 8.3: Resistance to Corrosion Clause 9.3: Protection from excessive dust Clause 11: Outdoor equipment containing vented batteries Clause A: Water - saturated sulphur dioxide atmosphere Clause B: Water spray test Clause C: UV light conditioning Test Only Clause 9.1 (ingress protection)	F F F F B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Audio/video, information and communication technology equipment	Electrical Safety	IEC 62368-1:2014 EN 62368-1:2014 EN 62368-1:2014/A11:2017	E, F
		Excluding: Clause 8.5.5 (High pressure lamps), Clause 10 (Radiation.) Except 10.2 (classification) Annex C, Annex J, Annex S.3, S.4 and S.5	E, F
Audio/video, information and communication technology equipment	Electrical Safety	IEC 62368-1:2023 EN IEC 62368-1:2024 IEC 62368-1:2018 EN IEC 62368-1:2020/A11:2020	E, F
		Excluding: Clause 8.5.5 (High pressure lamps) Clause 10 (Radiation) Annex C (UV Radiation) Annex J (Insulated winding wires) Clause 5.4.4.6.5 (Mandrel test) Annex G.15 (Liquid filled components) Annex G.5.3.4 (FIW) Annex S.3 (Flammability for bottom of fire enclosure) Annex S.5 (Flammability for enclosures exceeding 4000 W) Annex U (CRTs) Annex Y.2 (Resistance to UV Radiation) Annex Y.3 (Resistance to corrosion) Annex Y.5.2 (Protection from moisture) Annex Y.5.3 (Water spray test) Annex Y.5.5 (Protection from excessive dust)	E, F
		IEC 62368-1:2014 clause 10.6 IEC 62368-1:2018 clause 10.6	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Audio/video, information and communication technology equipment	Electrical Safety	Only Clause Y.5.2 (Protection from moisture)	B
Safety aspects for DC power transfer through communications cables and ports	Electrical Safety	IEC 62368-3:2017 EN IEC 62368-3:2020	E, F
Power transformers, power supplies and reactors	Electrical Safety	IEC 61558-1:2005	F
Safety isolating transformers for power supplies	Electrical Safety	IEC 61558-2-6:2005	F
Transformers for switched mode power supplies	Electrical Safety	IEC 61558-2-16:2009	F
Electrical Equipment for Measurement, Control and Laboratory use.	Electrical Safety	EN 61010-1:2001 EN 61010-1:2010 IEC 61010-1:2010 IEC 61010-1:2010 Am 1:2016 EN 61010-1:2010 + A1:2019 Excluding: 11.6 (ingress protection) 12.2.1 (ionising radiation) 12.3 (UV radiation) 12.4 (microwave radiation) 12.5.1 (sound level) 12.5.2 (ultrasonic pressure) 12.6 (laser sources) 14.1(d) (components, non-IEC standards compliance) Only 11.6 (ingress protection)	E, F E, F E, F E, F E, F E, F B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Laboratory equipment for the heating of material	Electrical Safety	IEC 61010-2-010:2014 EN 61010-2-010:2014 IEC 61010-2-010:2019 EN IEC 61010-2-010:2020	F E
Testing and measuring circuits	Electrical Safety	IEC 61010-2-030:2010 EN 61010-2-030:2010	E, F
Automatic and semi-automatic laboratory equipment for analysis	Electrical Safety	IEC 61010-2-081:2015 EN61010-2-081:2015 IEC 61010-2-081:2019 EN IEC 61010-2-081:2020	E, F E, F
In vitro diagnostic (IVD) medical equipment	Electrical Safety	IEC 61010-2-101:2015 IEC 61010-2-101:2018 EN 61010-2-101:2017	E, F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Medical Electrical intended for oxygen-rich environment, use with flammable anaesthetics, and programmable electrical medical systems (PEMS)	Electrical Safety	EN.60601-1:2006 + A1:2013 + A12:2014 EN.60601-1:2006 + A1:2013 + A12:2014 + A2:2021 IEC 60601-1:2005 +A1:2012 IEC 60601-1:2005 +A1:2012 + AMD2:2020	E, F
Equipment, except those		Excluding: 8.8.4.2 (environmental stress) 8.11.1e (supply mains switch) 9.6.2.1 (noise measurement) 9.6.3 (hand transmitted vibration) 9.7.5 (pressure tests) 10.1 (x-rays) 10.4 (laser and LED emissions) 10.5 (Other visible electromagnetic radiation) 10.6 (Infra-red radiation) 10.7 (Ultra violet radiation) 11.6.5 (ingress protection) 11.6.7 (sterilization) 11.7 (biocompatibility) 12.4.5 (diagnostic or therapeutic radiation) 15.4.3.4 (lithium batteries) Annex L (insulated winding wire) Only 11.6.5 (ingress protection)	B
Safety of Infusion Pumps	Electrical safety	IEC 60601-2-24: 2012 Excluding: - 208 (alarm noise level measurement) Only Clause 201.11 (ingress protection) Only Clause 208 (alarm noise level measurement)	F B G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Safety and essential performance of electromyogrpahs and evoked repsonse equipment	Electrical Safety	IEC 60601-2-40:2016 Excluding:- 201.12.4.104: limitation of visual stimulator output 202: EMC testing Only Clause 201.12.4.6 (acoustic pressure)	F G
Safety of non-laser light source equipment for therapeutic, diagnostic, monitoring and cosmetic use	Electrical safety	IEC 60601-2-57:2023 Excluding: 201.6.1.102: risk group class 201.10.103: output uniformity 201.12: accuracy of controls EN 60601-2-57: 2011 Excluding: 201.6.1.102: risk group class 201.10.103: output uniformity for risk group 3	F, E F
Safety and essential performance of home light therapy equipment	Electrical safety	IEC 60601-2-83:2019 + Amd1:2022 Excluding: 201.6.101: risk group classification 201.10.103 c stray optical radiation 201.107 optical radiation at a sampling frequency (flickering and flashing light) IEC 60601-2-83:2019	F, E F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	11 ELECTRICAL SAFETY TESTS (cont'd)		
Medical electrical equipment	Part 1-6 General requirements for Basic Safety and essential performance - Collateral standard: Usability	IEC 60601-1-6:2010 + AMD1:2013 (incl IEC 62366-1:2007 + AMD1:2014) IEC 60601-1-6:2010 + AMD1:2013 + AMD2:2020 EN 60601-1-6:2010 +A1:2015 + A2:2021 (incl IEC 62366-1:2015 + AMD1:2020)	F
Alarm systems in medical electrical equipment	Electrical safety noise emission	IEC 60601-1-8:2006 + A1 EN 60601-1-8:2007 + A1 IEC 60601-1-8:2006 + A2:2020 EN 60601-1-8:2007 + A2:2021 Excluding: 6.3.3 (alarm noise level measurement) Only Clause 6.3.3 (alarm noise level measurement)	F G
Safety of Home Healthcare Equipment	Electrical safety	EN 60601-1-11:2015 EN 60601-1-11:2015 + A1:2021IEC 60601-1-11:2015 IEC 60601-1-11:2015 + AMD1:2020 Excluding: 4.2.3.1: Pressure Testing 12: EMC Testing 13: Acoustic Alarms testing Only Clause 8.3 (ingress protection) Only Clause 13 (Acoustic alarms)	F B G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Safety of Emergency Medical Equipment	Electrical safety	IEC 60601-1-12:2014 BS EN 60601-1-12:2015 IEC 60601-1-12:2014 + A1:2020 EN 60601-1-12:2015 + A1:2020 Excluding:- 11: EMC Testing Only Clause 8.3 (ingress protection)	F B
Safety of Emergency Medical Equipment	Basic safety and essential performance of oxygen concentrator equipment	ISO 80601-2-69:2014 Excluding Clauses 201.12 and 201.105; Cl 201.11.2.101 and 201.102.3; Cl 201.12.4.103	F
Medical device software	Software life cycle processes	IEC 62304:2006+AMD1:2015	F
Medical devices	Part 1: Application of usability engineering to medical Devices	IEC 62366-1:2015 Note: only in conjunction with IEC 60601-1-6:2010/AMD1:2013	F
Note: Where EN electrical Safety Standards have exact equivalents in IEC, or BS EN Standards, these are also included in the accreditation.			

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in Potentially Explosive Atmospheres Electrical apparatus for explosive gas atmospheres General requirements	**12 EX PRODUCT TESTS** Construction, safety and marking Thermal Stability min temp - 70 °C max temp 200 °C	IEC 60079-0 :2017 (Ed.7) EN 60079-0 :2018 IEC 60079-0:2011 (Ed.6) EN 60079-0:2012/A11:2013 IEC 60079-0:2007 (Ed.5) EN 60079-0:2009 (withdrawn) IEC 60079-0:2004 (withdrawn) EN 60079-0:2006 (withdrawn)	B, I
Tests for Flameproof equipment (Exd)	Construction, safety and marking	IEC 60079-1:2014 (Ed.7) EN 60079-1:2014 IEC 60079-1:2007 (Ed.6) (withdrawn)	B, I
Tests for Purged and Pressurised equipment (Exp)	Construction, safety and marking	IEC 60079-2:2014 (Ed.6) EN 60079-2:2014 IEC 60079-2:2007 (Ed.5) (withdrawn) EN 60079-2:2007 (withdrawn)	B, I
Tests for oil immersion (Exo)	Construction, safety and marking	IEC 60079-6:2007 (Ed.3) EN 60079-6:2007	B, I
Tests for Increased Safety Apparatus (Exe)	Construction, safety and marking	IEC 60079-7:2006 Ed. 4 (withdrawn) EN 60079-7:2007 (withdrawn) EN 60079-7:2015 IEC 60079-7:2015 Ed. 5	B, I
Tests for Intrinsically Safe Apparatus, Associated Apparatus and Systems (Exi)	Construction, safety and marking	IEC 60079-11:2011 (Ed.6) EN 60079-11:2012 IEC 60079-11:2006 (Ed.5) (withdrawn) EN 60079-11:2007 (withdrawn)	B, I

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	12 EX PRODUCT TESTS (cont'd)		
Tests for Electrical Apparatus for Explosive Atmospheres with Pressurized room "p"	Construction, safety and marking	IEC 60079-13:2010 (Ed.1) EN 60079-13:2010	B, I
Tests for Electrical Apparatus for Explosive Atmospheres with Type of Protection n (Exn)	Construction, safety and marking	IEC 60079-15 :2017 (Ed.5) EN 60079-15 :2019 IEC 60079-15:2010 (Ed.4) EN 60079-15:2010 IEC 60079-15:2005 (Ed.3) (withdrawn) EN 60079-15:2005 (withdrawn)	B, I
Tests for Encapsulated equipment (Exm)	Construction, safety and marking	IEC 60079-18:2014/A1:2017 EN 60079-18:2015/A1:2017 IEC 60079-18:2009 (Ed.3) (withdrawn) EN 60079-18:2010 (withdrawn) EN 60079-18:2015 IEC 60079-18:2014 (Ed. 4) IEC 60079-18:2004 (Ed. 2) (withdrawn) EN 60079-18:2004 (withdrawn)	B, I
Equipment with equipment protection level (EPL) Ga	Construction, safety and marking	IEC 60079-26:2007 EN 60079-26:2007	B, I
Protection of equipment and transmission systems using optical radiation	Construction, safety and marking	IEC 60079-28:2015 (Ed.2) EN 60079-28:2015 IEC 60079-28:2006 (Ed.1) (withdrawn) EN 60079-28:2007 (withdrawn)	B, I
Protection by enclosure "t"	Construction, safety and marking	IEC 60079-31:2013 (Ed 2) IEC 60079-31:2008 (Ed.1) EN 60079-31:2009	B, I

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	12 EX PRODUCT TESTS (cont'd)		
Non-Electrical Equipment for explosive atmospheres	Basic method and requirements	IEC 80079-36:2016	B, I
Non-Electrical Equipment for explosive atmospheres	Non-electrical type of protection constructional safety "c", control of ignition "b", liquid immersion "k"	IEC 80079-37:2016	B, I
Tests for Electrical Apparatus with Protection by Enclosure for use in the presence of Combustible Dusts General requirements	Construction, safety and marking	IEC 61241-0:2004 (withdrawn)	B, I
Tests for Electrical Apparatus with Protection by Enclosure for use in the presence of Combustible Dusts Protection by enclosure "tD"	Construction, safety and marking	IEC 61241-1:2004 (withdrawn) Excluding: Practice B	B, I
Tests for Purged and Pressurised equipment (Exp) Enclosure for use in the presence of Combustible Dusts	Construction, safety and marking	IEC 61241-4:2001 (withdrawn)	B, I
Tests for Encapsulated equipment for use in the presence of Combustible Dusts (ExmD)	Construction, safety and marking	IEC 61241-18:2004 (withdrawn)	B, I
Protection by intrinsic safety "iD"	Construction, safety and marking	IEC 61241-11:2005 (withdrawn)	B, I

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	12 EX PRODUCT TESTS (cont'd)		
Basic Methods and Requirements	Construction, safety and marking	EN 13463-1:2009 EN 13463-1:2001 (withdrawn)	B, I
Constructural safety 'c'	Construction, safety and marking	EN 13463-5:2011 EN 13463-5:2003 (withdrawn)	B, I
Protection by liquid immersion "k"	Construction, safety and Marking	EN 13463-8:2003	B, I
Environmental Conditions and test procedures for Airborne Equipment	Explosion Testing Explosive Atmospheres	RTCA DO-160F Section 9 General exclusions to Ex tests (a) HV machines operating at >1000V e.g. motors and transformers; (b) Shock and Vibration tests; (c) UV light testing; (d) Specific tests on luminaires: torque tests (clause 5.3); asymmetric pulse test (Annex H); sulphur dioxide test (clause 6.3).	B, I

Where IEC or EN standards have exact equivalents in BS, EN or BS EN Standards these are also included in the accreditation.

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	13 INGRESS PROTECTION TESTS		
Enclosures for Electrical Equipment	IP1X Protected against solid objects greater than 50 mm diameter IP2X Protected against solid objects greater than 12 mm diameter IP3X Protected against solid objects greater than 2.5 mm diameter IP4X Protected against solid objects greater than 1.0 mm diameter IP5X Dust Protected Excluding: Objects greater than 2500 x 2500 x 2500 mm Max weight: 800 kg IP6X Dust Tight Excluding: Objects greater than 2500 x 2500 x 2500 mm Max weight: 800 kg IPX2 Protected against vertically falling water drops when enclosure tilted up to 15° IPX3 Protected against spraying water IPX4 Protected against splashing water IPX5 Protected against water jets	IEC 60529:1989/A2:2013 EN 60529:1992/A2:2013	B
Where IEC or EN standards have exact equivalents in BS, EN or BS EN Standards, these are also included in the accreditation.			

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Enclosures for Electrical Equipment (cont'd)	**13 INGRESS PROTECTION TETS** (cont'd) IPX6 Protected against powerful water jets IPX7 Protected against the effects of temporary immersion in water IPX8 Protected against the effects of continuous immersion in water Max Immersion Depth 2000 mm	IEC 60529:1989/A2:2013 EN 60529:1992/A2:2013	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Aerospace Components and Equipment Audio Amplifying Equipment Battery Chargers Circuit Breakers and Switches Computer and Peripherals Data terminal equipment Electrical/Electronic Components Electrical Cables Electrical Control Equipment Electrical and Electronic Products Electrical Musical Instruments Electrical Measurement and Test Equipment Electronic Products: Digital Enclosures for Electrical Equipment Fans Fire Fighting and Detection Equipment Generators: Electric Generators: Power Instruments: Indicating and Recording IT Equipment Measuring Equipment Medical/Dental Equipment Micro-Electronic Circuits and Components Missile Components Motors: Electrical Motor Vehicle Accessories and Components Office Equipment: Electrical Photocopying Machines Plugs and Sockets: Electrical Point of Sale Terminals	**14 ENVIRONMENTAL TESTS** 14.1 LOW TEMPERATURE (constant and cyclic) Min temp: -50 °C Max chamber size: 2100 x 1650 x 2550h mm Min temp: -65 °C Max chamber size: 750 x 1000 x 750 mm	BS EN 60068-2-1:1993+ A1:1993+ A2 !994 IEC 60068-2-1:1990 IEC/EN 60068-2-1:2007 BS 2011:Part 2.1A:1990+A1: Including Amendment 1 BS 2011:Part 2.1A:1977 EN 50130-5:1999 EN 50130-5:2011	F
	14.2 HIGH TEMPERATURE **(constant only)** Max temp: +200 °C Max chamber size: 530 x 470 x 800 mm **(constant and cyclic)** Max temp: +70 °C Max chamber size: 2100 x 1650 x 2550h mm Max temp: +150 °C Max chamber size: 750 x 1000 x 750 mm Max temp: +200 °C Max chamber size: 390 x 270 x 300 mm	BS EN 60068-2-2:1993+ A1:1993 IEC 60068-2-2:1974 IEC/EN 60068-2-2:2007 BS 2011:Part 2.1B:1977 EN 50130-5:1999 EN 50130-5:2011	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 79	**14 ENVIRONMENTAL TESTS** (cont'd) 14.3 HIGH HUMIDITY (Constant and cyclic) Temp range: +20 °C to +70 °C Humidity range: 40 % rh to 98 % rh Max chamber size: 2100 x 1650 x 2550h mm Temp range: +20 °C to +100 °C Humidity range: 40 % rh to 98 % rh Max chamber size: 750 x 1000 x 750 mm **(constant only)** Temp range: +30 °C to +100 °C Humidity range: 40 % rh to 98 % rh Max chamber size: 640 x 500 x 540 mm	BS 2011:Part 2.1Ca:1977+A1 IEC 60068-2-3:1969 BS 2011:Part 2.1Cb:1990 IEC 60068-2-56:1988 BS EN 60068-2-30:1999 BS EN 60068-2-30:2005 IEC 60068-2-30:1980 IEC/EN 60068-2-30:2005 IEC/EN 60068-2-78:2001 EN 50130-5:1999 EN 50130-5:2011 BS 2011:Part 2.1Db:1981+A1 BS EN 60068-2-38:1999 BS EN 60068-2-38:2009 IEC 60068-2-38:1974 IEC/EN 60068-2-38:2009 BS 2011:Part 2.1Z/AD:1977	F
	14.4 THERMAL SHOCK Max temp: +150 °C Min temp: -65 °C Max chamber size: 750 x 1000 x 750 mm Max temp: +200°C Max chamber size: 530 x 470 x 800 mm	BS EN 60068-2-14:2000 IEC 60068-2-14:1984 IEC/EN 60068-2-14:2009 BS 2011:Part 2.1N:1985,+ A1 Tests Na, Nb EN 50130-5:1999 EN 50130-5:2011	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 79	**14 ENVIRONMENTAL TESTS** (cont'd) 14.5 VIBRATION (Ambient temperature only) Sinusoidal VP30 Freq range: 5 to 4000 Hz Max peak thrust: 1245 N Max payload (vertical): 22.7 kg Max displacement: ± 6·35 mm VP1200 Freq range: 5 to 1000 Hz Max peak thrust: 55600 N Max payload (vertical): 750 kg Max displacement: ± 12.5 mm Random VP30 Freq range: 5 to 4000 Hz Max peak thrust: 587 N Max payload (vertical): 22.7 kg Max displacement: ± 6·35 mm VP1200 Freq range: 5 to 2500 Hz Max peak thrust: 35140 N Max payload (vertical): 750 kg Max displacement: ± 12.7 mm	BS EN 60068-2-6:1996 IEC 60068-2-6:1995+C1:1995 IEC/EN 60068-2-6:2008 BS 201:Part 2.1Fc:1983+A1+A2 BS 2011:Part 2.1Fd:1973 BS 2011:Part 2.1Fda:1973 BS 2011:Part 2.1Fdb:1984+A1+A2 BS 2011:Part 2.1Fdc:1973+A1+A2 BS EN 60068-2-64:1995 IEC 60068-2-64:1993+C1:1993 IEC/EN 60068-2-64:2008 EN 50130-5:1999 EN 50130-5:2011	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 79	**14 ENVIRONMENTAL TESTS** (cont'd) 14.6 SHOCK/BUMP (Ambient temperature only) Half sign Rectangle Triangle Sawtooth VP30 Severity: 1 g to 30 g Duration: 2 ms to 25 ms (severity dependant) Max item mass: 10 kg VP1200 Severity: 1 g to 80 g Duration: 2 ms to 25 ms (severity dependant) Max item mass: 750 kg	BS EN 60068-2-27:1993+A1 IEC 60068-2-27:1987 IEC/EN 60068-2-27:2009 EN 50130-5:1999 EN 50130-5:2011 BS 2011:Part 2.1Ea:1987 BS EN 60068-2-29:1993+A1 IEC 60068-2-29:1987 BS 2011:Part 2.1Eb:1987 ETS 300 019-2-1:1994 ETS 300 019-2-2:1999 ETS 300 019-2-3:1999 ETS 300 019-2-4:1999 ETS 300 019-2-5:1994 ETS 300 019-2-6:1994 ETS 300 019-2-7:1994 ETS 300 019-2-8:1999 Excluding: ETS 300 019-2-2 T2.3 rain test ETS 300 019-2-3 T3.1 to 3.5 Earthquake test ETS 300 019-2-4 T4.1 Earthquake test T4.1 and 4.1E rain tests ETS 300 019-2-5 T5.1 and T 5.2 (IEC Class 5M3) Shock test ETS 300 019-2-6 T6.2 and 6.3 rain tests ETS 300 019-2-7 T7.3 and 7.3E rain tests ETS 300 019-2-8 T8.1 water tests	F
	14.7 Free Fall (Operational) Height: 0.5 m to 1.5 m	EN 50130-5:1999 EN 50130-5:2011	F

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Telecommunications Equipment IT Equipment Electronic Products, Digital	**15 TELECOMMUNICATIONS TESTING** 15.3 Analogue and Digital attachments to the PSTN	FCC:Part 68:Sub Part D TIA-968-B:2009 TIA-968-B1:2012 TIA-968-B2: 2015 TIA-968-B3: 2016 TIA-168-C: October 2015 TIA 1096-A:2008 TIA/EIA/TSB 168-B-1:2012 CS-03, Part I Issue 9, Amdt 5 CS-03, Part II, Issue 9, Amdt 1 CS-03, Part V Issue 9, Amdt 2 + Amnd 3 Aug 2021 CS-03, Part VI Issue 9, Amdt 1 AS/ACIF S004:2013	G

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Short Range Radios DECT Telephones CT1 & CT1+ Telephones Land Mobile Radio (PMR) Public mobile services Equipment Personal Communications Services Equipment Satellite communications Equipment Radio Broadcast Services Equipment Experimental radio, auxiliary Special broadcast and Other program distributional Services equipment Private Land Mobile radio Services Equipment Personal Radio services Equipment Amateur Radio Service Equipment	**16 RADIO TESTING** Analogue measurements 9 kHz to 1000 MHz Digital measurements 9 kHz to 2500 MHz DECT test cases 1 to 26 as stated in EN 301 406 16.1 Frequency Error 0.5 MHz to 2.6 GHz 16.2 Transmitter Carrier Power 5 mW to 50 W 16.3 Adjacent Channel Power 4 MHz to 1000 MHz 5 mW to 50 W 16.4 Adjacent Channel Selectivity 0.5 MHz to 1000 MHz 16.5 Co-Channel Rejection 0.5 MHz to 1000 MHz 16.6 Conducted Spurious Emissions 9 kHz to140 GHz 16.7 Radiated Spurious 9 kHz to 140 GHz	 EN 300 086-1:V1.4.1:2010 EN 300 086-2:V1.3.1:2010 ETSI 302 065-1 V2.1.1:2016 ETSI EN 300 113 V2.2.1(2016-12) ETSI EN 301 511 V12.5.1:2017 (RSE only) 3GPP TS 34.124 (RSE only) 3GPP TS 36.124 (RSE only) 3GPP TS 38.124 (RSE only) ETSI EN 300 220-1 v3.1.1 ETSI EN 300 220-2 v3.1.1 ETSI EN 300 220-2 v3.2.1 ETSI EN 300 220-3-1 v2.1.1 ETSI EN 300 220-3-2 v1.1.1 ETSI EN 300 220-4 v1.1.1 ETSI EN 300 224-1:V1.3.1:2001 EN 300 224-2:V1.1.1:2001 EN 300 296-1:V1.4.1:2013 EN 300 296-2:V1.4.1:2012 EN 300 328 V2.2.2 (2019-07) EN 301 908-1 V15.2.1 (2023-01) EN 301 908-1 V15.1.1:2021 EN 301 908-13 V13.1.1:2021 ETSI EN 300 330 v2.1.1 (2017-02) EN 302 291-1 V1.1.1:2005 ETSI EN 300 440 v2.2.1 (2018-07)	 H H S S S S H H, S H, S S S H, S H H, S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 84	**16 RADIO TESTING** (cont'd)		
	16.8 Transient Power	EN 300 422-1:V1.2.2:2000 EN 300 422-2:V1.1.1:2000	H
	16.9 Modulation Bandwidth	EN 302 208-1:V1.4.1:2011	H
	16.10 Frequency Stability	EN 302 208-2:V1.4.1:2011 AS/NZS 4268:2008 ETSI EN 303 413 V1.2.1:2021	S
	16.11 Receiver Sensitivity	ETSI EN 301 893 V2.1.1 (2017-05 ETSI EN 302 502 V1.2.1 (2008-07) ETSI EN 303 687 V1.1.1 (2023)	H, S H, S S
		ETSI EN 301 908-11 V11.1.2 ETSI EN 301 908-15 V15.1.1 (2020-01) ETSI EN 301 908-15 V11.1.2 ETSI EN 303 609 V12.5.1 AS/NZS 4268:2012 AS/NZ 4295:2004 AS NZS 4415:1996	H
	16.12 Channel Characteristics	ETSI EN 302 625 V1.1.1 (2009-07)	
		EN 303 372-1:V1.1.1 (excluding clause 4.3.2 Antenna gain pattern) Radiated LO and EIRP tests in Reverb Chamber. Excludes Wind tunnel tests other than pointing accuracy part. EN 303 372-2:V:1.1.1 EN 303 340:V1.1.2	H, E H, E H, E
	16.13 Intermodulation		
	16.14 Distortion	BETS-1 Issue 1 (FM only) BETS-6 Issue 2 (FM only)	H H
	16.15 SINAD and S/N Ratio		
	16.16 Selectivity		
	16.17 Non-Occupancy Period		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 84	**16 RADIO TESTING** (cont'd)		
	16.18 DFS Detection		
	16.19 Channel Availability Check time and Off Channel Availability Check		
	16.20 U-NII Detection Bandwidth		
	16.21 U-NII Detection Bandwidth and statistical performance check	RSS Gen issue 5 April 2018 RSS 111 Issue 5 September 2014 RSS 119 issue 12 May 2015 RSS 131 Issue 3 May 2017	H, S H H H
	16.22 Channel Closing		H
	Transmission time (Channel Shutdown) 16.23 Channel Move Time	RSS-210 Issue 11, June 2024 RSS 213 issue 3 March 2015 RSS 215 issue 2 June 2009 RSS 220 issue 1 Amendment 1 July 2018 RSS 243 issue 3 Feb 2010 RSS 247 issue 3 August 2023 RSS 251 Issue 2 July 2018 RSS 287 issue 2 Feb 2014 RSS 288 issue 1 Jan 2012	H, S H
		ANSI C63.10 2013 ANSI C63.17 2006 ANSI C63.26 2015 ANSI/TIA-603-D ANSI/TIA-603-E TIA-102.CAAA-D TIA-102.CAAA-E	H, S H
Flexible Use Broadband Equipment Operating in the Band 3450-3650 MHz	Occupied bandwidth Frequency stability Transmitter output power, EIRP, TRP Transmitter unwanted emissions (up to 36.5 GHz)	RSS-192, Issue 5, July 2023	H

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Flexible Use Broadband Equipment Operating in the Band 3900-3980MHz	Occupied bandwidth Frequency stability Transmitter output Power (EIRP&TRP) Transmitter unwanted emissions (up to 39.8GHz)	RSS-198 Issue 1, July 2023	H
Wireless Broadband Access Equipment Operating in the Band 3650-3700 MHz	Channel Bandwidth Transmitter Frequency Stability Transmitter Output Power and EIRP Transmitter Unwanted Emissions (up to 37 GHz) Receiver Spurious Emissions (up to 37 GHz)	RSS-197, Issue 1, Feb 2010	H
Radio Local Area Network (RLAN) devices	5925 – 7125 MHz	RSS-248 Issue 2:2022	S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	17 SAR Testing		S
Electronic and Electrical Equipment with intentional Transmitters – intended to be used within less then 20 cm of body or head	17.1 Specific Absorption Rate SAR: 6MHz to 8.7GHz Using the DASY 8 system PD: 6GHz to 110GHz Absorbed Power Density 5925 to 7125 MHz	FCC 47 CFR Part 1.1310 FCC 47 CFR Part2.1093 FCC KDB 447498 D01 v06 ***D02, D03, D04*** FCC KDB 616217 D04 FCC KDB 648474 D03, D04 FCC KDB 865664 D01, D02 FCC KDB 248227 D01 FCC KDB 615223 D01 FCC KDB 680106 D01 FCC KDB 643646 D01 FCC KDB 941225 D01, D05, D05A, D06, D07 FCC OET Bulletin 65 IEEE C95.1:2019/Corr2:2020 IEEE C95.3:2021 RSS-102 issue 6 RSS-102 SAR.MEAS RSS-102 IPD.MEAS SPR-APD issue 1 BS EN IEC/IEEE 63195-1:2023 EN 63195-1:2023 Nov 2017; Oct 2018; April 2019; Nov 2019; Oct 2020 TCB Workshop Notes (IEEE 80211ax) SPEAG DASY8 Application Note (updated Interim Procedures (versión 9.0) for Devices Operating at 6 – 10 GHz (August 2023) Interim procedures introduced during the TCB October 2022 EN/IEC/IEEE 62209-1528:2021 IEC/IEEE 62209-1528:2020	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electronic and Electrical Equipment with intentional Transmitters – intended to be used within less then 20 cm of body or head (cont'd)	17.1 Specific Absorption Rate (cont'd)	PD IEC TR 63170:2018 IEC 62479:2010 EN 62479:2010 EN 50566: 2017 EN 50360: 2017 EN 50663: 2017 EN 50665: 2017 EN 50364: 2018 EN 62209-1: 2016 IEC 62209-1:2016 EN 62209-2: 2010 +A:2019 IEC 62209-2: 2010 including A1 IEC 62311: 2019 EN 62311: 2020 IEC 62311: 2007 EN 62311: 2008 IEEE Std 1528:2013 AS/NZS 2772.2:2016+A1:2018 General public exposure limits from ARPANSA Radiation Protection Series S-1 (Rev.1) (2021)	S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	Facilities at Skelmersdale: Shielded Room A: 9 m x 5.7 m x 5.75 m Semi / Fully Anechoic (Chamber 1) Shielded Room B: 9 m x 5.7 m x 5.75 m Semi / Fully Anechoic (Chamber 2) Shielded Room C: 7.1 m x 4.1 m x 3.5 m Semi / Fully Anechoic (Immunity) Shielded Room D: 5.1 m x 3.1 m x 2.6 m Screened Room (Transient) Shielded Room E: 5.6 m x 2.4 m x 2.6 m (Semi / Fully Anechoic (MAC) Numerous Bench Laboratories ranging from 5 m x 3 m x 2.5 m to 6 m x 6 m x 3 m Secure Storage Room: 10.1 m x 2.7 m x 3 m Dimensions = Length (l) x Width (w) x Height (h) Max EUT Size: 2 m x 2 m x 3 m Max EUT Weight: 5000 kg Max Turntable Weight of EUT:2000 kg Power Supplies Available: $\leq$ 240V AC 13A, 1 phase 50Hz 240V AC 16A, 1 phase 50Hz $\leq$ 240V AC 32A, 1 phase 50Hz 240V AC 64A, 1 phase 50Hz 415V AC 92A (115kVA), 3 phase 50Hz 415V AC 64A, 3 phase 50Hz $\leq$ 415V AC 32A, 3 phase 50Hz 115V AC 13A, 1 phase 50 / 60Hz 0.1V AC - 341V AC, 3 phase 20Hz – 5kHz (6kVA) 0 - 110V DC 10A 0 - 60V DC 50A		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	Facilities at Skelmersdale (cont'd): Freezer/Oven enclosure size for Thermal Stability test -40 °C to 60 °C, 490 x 500 x 480 mm Freezer enclosure size for Thermal Stability test -70 °C, 1120 x 540 x 650 mm Humidity enclosure size for Thermal Stability test -25 °C to 100 °C, 650 x 650 x 600 mm Humidity enclosure size for Thermal Stability test -25 °C to 100 °C, 700 x 700 x 500mm Dust Chamber for IP5X and IP6X, size 2500 x 2500 x 2500 mm Max weight: 800 kg		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	Facilities at Malvern: Shielded Room A: 8.7 m x 5.7 m x 5.4 m Shielded Room B: 8.7 m x 5.7 m x 5.4 m Shielded Room C: 2.5 m x 2.5 m x 3 m Shielded Room D: 5.7 m x 2.6 m x 2.4 m Shielded Room E: 18 m x 16 m x 6 m Shielded Room F: 5 m x 5 m x 4 m Shielded Room G: 5.5 m x 5 m x 4 m Shielded Room H: 4 m x 3 m x 3 m Shielded Room I: 4 m x 3 m x 3 m GTEM 1650 Power supplies Available:- 240V AC 13A, 1 phase 240V AC 32A, 1 phase 115V AC 13A, 1 phase 415V AC 16A, 3 phase 415V AC 32A, 3 phase 415V AC 64A, 3 phase 60V DC 100A 415V AC 400Hz 32A, 3 phase		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	Facilities at Wimborne: Shielded Room A: 9 m x 5.7 m x 5.75 m Semi / Fully Anechoic (Comm 1) Shielded Room B: 9 m x 5.7 m x 5.75 m Semi / Fully Anechoic (Comm 2) Shielded Room C: 5 m x 4 m x 2.5 m Screened Room (Transient 1) Shielded Room D: 8 m x 6 m x 4 m Semi Anechoic (Mil 1) Shielded Room E: 8 m x 6 m x 4 m Semi Anechoic (Mil 2) Shielded Room F: 8 m x 6 m x 4 m Semi Anechoic (Mil 3) Shielded Room G: 3.5 m x 2.5 m x 2.9 m Reverb Chamber (Reverb 1) Shielded Room H 1.3 m x 1.1 m x 1.5 m Reverb Chamber (Reverb 2) 6 x Sielded Control Rooms 3 m x 2.5 m x 2.5 m Indirect Lightning Laboratory Secure Storage Room: 6 m x 5 m x 2.3 m Dimensions = Length (l) x Width (w) x Height (h) Max EUT Size: 2 m x 2 m x 3 m Max EUT Weight: 5000 kg Max Turntable Weight of EUT: 2000 kg Environmental Chamber 940 mm x 870 mm x 775 mm Temperature (- 20 ºC to + 100 ºC) and Humidity (20 % to 75 %)		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	Facilities at Wimborne (cont'd) Power Supplies Available:- 240V AC 50 / 60 Hz 1 Phase up to 32 A 115V AC 50 / 60 Hz 1 Phase up to 32A 415V AC 50 / 60 Hz 3 Phase up to 125A 3 x115 / 208V AC 400Hz 3 Phase up to 5 kVA 28 V DC up to 100 A 100Vdc up to 100A Programmable 1 Phase Supply DC to 500Hz / 0 to 270 V up to 18.5 A		
	EMC Facilities at Hull: Open Field Site: 3 m and 10 m Screened Rooms (h x w x l) a) 3.66 m x 4.28 m x 6.7 m 2 ft absorbers on all walls: 3 ft absorber on ceiling b) 2.4 m x 2.4 m x 3.66 m c) 2.4 m x 2.4 m x 3.66 m d) 5.8 m x 6.3 m x 9.2 m Ferrite tiles on walls and ceiling (3 m alternative emissions test site) Power supplies: DC and 50/60 Hz		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	EMC Facilities at Hull: (cont'd) a) 3.66 m x 4.28 m x 6.7 m 2 ft absorbers on all walls: 3 ft absorber on ceiling b) 2.4 m x 2.4 m x 3.66 m c) 2.4 m x 2.4 m x 3.66 m d) 5.8 m x 6.3 m x 9.2 m Ferrite tiles on walls and ceiling (3 m alternative emissions test site)		
FCC Scope			
UNINTENTIONAL RADIATORS FCC Part 15, subpart B	Radiated Emissions 30 MHz to 40 GHz Conducted Emissions 9 kHz to 30 MHz	ANSI C63.4-2014 ANSI C63.4a-2017	A, B, C, G, H, S
INDUSTRIAL, SCIENTIFIC AND MEDICAL EQUIPMENT Consumer ISM Equipment FCC Part 18	Radiated Emissions 30 MHz to 40 GHz Conducted Emissions 9 kHz to 30 MHz	FCC MP-5 (February 1986),	A, B, C, G, H, S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
INTENTIONAL RADIATORS FCC Part 15, subpart C	Radiated Emissions 9 kHz to 110 GHz Conducted Emissions 9 kHz to 30 MHz Radio tests as per standard. Includes but not limited to: *Peak transmit power* *Emission bandwidth / Occupied BW* *Modulation* *Power spectral density* *Band edge tests* *Permitted Frequency range* *In-band unwanted emissions* *Out-of-band emissions* *Spurious Emissions* *Reaction time* *Frequency and Time Stability*	ANSI C63.10-2013	H, S
UNLICENSED PERSONAL COMMUNICATION SYSTEMS DEVICES FCC Part 15, Subpart D	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.17-2013	H
UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES WITHOUT DFS (INTENTIONAL RADIATORS) FCC Part 15, Subpart E	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.10-2013 KDB Publication 789033	H, S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES WITH DYNAMIC FREQUENCY SELECTION (DFS) FCC Part 15 Subpart E	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 110 GHz Radio tests as per standard. DFS tests per new rules.	ANSI C63.10-2013 KDB Publication 905462 D02 UNII DFS Compliance Procedures New Rules v02 (April 8, 2016)	H, S
ULTRA-WIDEBAND OPERATION INTENTIONAL RADIATORS FCC Part 15, Subpart F	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.10-2013	H
COMMERCIAL MOBILE SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 22 (cellular) FCC Part 24 FCC Part 25 (below 3 GHz) FCC Part 27	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.26 2015 ANSI/TIA-603-E KDB Publication 971168 TIA-102.CAAA-E	H
GENERAL MOBILE RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 22 (non-cellular) FCC Part 90 (below 3 GHz) FCC Part 95 (below 3 GHz) FCC Part 97 (below 3 GHz) FCC Part 101 (below 3 GHz)	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.26 2015 ANSI/TIA-603-E TIA-102.CAAA-E	H

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
CITIZENS BROADBAND RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 96	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard	ANSI C63.26 2015 ANSI/TIA-603-E KDB Publication 971168 KDB Publication 940660	H
MICROWAVE AND MILLIMETRE BANDS RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 25 FCC Part 30 FCC Part 74 FCC Part 90 (above 3GHz) FCC Part 95 (above 3 GHz) FCC Part 97 (above 3 GHz) FCC Part 101	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.26 2015 ANSI/TIA-603-E TIA-102.CAAA-E KDB Publication 653005	H
BROADCAST RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 73 FCC Part 74 (below 3 GHz)	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Radio tests as per standard.	ANSI C63.26 2015 ANSI/TIA-603-E TIA-102.CAAA-E	H
RF EXPOSURE Devices subject to SAR requirements	Specific Absorption Rate 6 MHz to 8.7 GHz	IEEE Std 1528:2013 IEC/IEEE 62209-1528:2020 KDB Publication 865664 KDB Publication 447498	S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SIGNAL BOOSTERS Wideband Consumer signal boosters Provider-specific signal boosters Industrial signal boosters FCC Part 20 Signal Boosters (Section 90.219)	Radiated Tests 9 kHz to 110 GHz Conducted Tests 9 kHz to 50 GHz Noise Limits, Power Limits Bidirectional Capability Booster Gain Limits, Gain Control Transmit Power Off Mode Out of Band Emission Limits Intermodulation Limits Booster Antenna Kitting Uplink Inactivity Anti-Oscillation Occupied bandwidth Spurious emissions	ANSI C63.26:2015 KDB Publication 935210 D03, D04 and D05	H

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Canadian MRA - ISED Scope of Accreditation			
General Requirements for Compliance of Radio Apparatus	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-Gen Issue 5:2018 ANSI C63.10:2013 ANSI C63.26:2015	H, S H, S H
Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus	 Exclusion Calculation only	RSS-102 Issue 6:2023 RSS-102.SAR.MEAS RSS-102.IPD.MEAS RSS-102 Issue 6:2023	S H
Broadband Public Safety Equipment	Operating in the Band 4940-4990 MHz	RSS 111 Issue 5 September 2014	H
Land Mobile and Fixed Equipment Flexible Use Broadband Equipment Operating in the Band 3450-3650 MHz	Operating in the Frequency Range 27.41 to 960 MHz Occupied bandwidth Frequency stability Transmitter output power, EIRP, TRP Transmitter unwanted emissions (up to 36.5 GHz)	RSS 119 issue 12 May 2015 RSS-192, Issue 5, July 2023	H H
Wireless Broadband Access Equipment Operating in the Band 3650-3700 MHz	Channel Bandwidth Transmitter Frequency Stability Transmitter Output Power and EIRP Transmitter Unwanted Emissions (up to 37 GHz) Receiver Spurious Emissions (up to 37 GHz)	RSS-197, Issue 1, Feb 2010	H

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Flexible Use Broadband Equipment Operating in the Band 3900-3980MHz	Occupied bandwidth Frequency stability Transmitter output Power (EIRP&TRP) Transmitter unwanted emissions (up to 39.8GHz)	RSS-198 Issue 1, July 2023	H
Licence-Exempt Radio Apparatus: Category I Equipment	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-210 Issue 11, June 2024	H
2 GHz Licence-Exempt Personal Communications Services (LE-PCS) Devices	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-213 Issue 3, March 2015	H
Analogue Scanner Receivers	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-215 Issue 2, June 2009	H
Ultra-Wideband (UWB) Technology	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-220 Issue 1, March 2009 (Amendment July 2018)	H
Active Medical Implants Operating in the 401-406 MHz Band	Conducted and Radiated Tests 9 kHz to 40 GHz	RSS-243 Issue 3, February 2010	H
Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-247 Issue 3 August 2023 including DFS	H, S
Radio Local Area Network (RLAN) devices	5925 – 7125 MHz	RSS-248 Issue 2:2022	S

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Field Disturbance Sensors in the Bands 46.7-46.9 GHz (Vehicular Radar) and 76-77 GHz (Vehicular and Airport Fixed Radar)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-251 Issue 2, July 2018	H
Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-287 Issue 2, March 2014	H
Global Maritime Distress and Safety System (GMDSS)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-288 Issue 1, January 2012	H
Analogue and Digital attachments to the PSTN	Terminal Equipment (TE) and Related Access Arrangements Intended for Direct Connection to Analog Wireline Facilities	CS-03, Part I Issue 9, Amdt 5	G
	Requirements for Terminal Equipment Intended for Connection to1.544 Mbps (DS-1) Digital Interfaces	CS-03, Part II, Issue 9, Amdt 1	G
	Requirements and Test Methods for Magnetic Output From Handset Telephones for Hearing Aid Coupling and for Receive Volume Control	CS-03, Part V Issue 9, Amdt 3	G
	Requirements for Integrated Services Digital Network Terminal Equipment	CS-03, Part VI Issue 9, Amdt 1	G

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Issue No: 175 **Issue date:** 12 April 2025

Testing performed by the Organisation at the locations specified

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Broadcast equipment	Low Power Announce Transmitters in the Frequency Bands 525-1,705 kHz and 88-107.5 MHz	BETS-1 Issue 1	H
	BETS-6 — Technical Standards and Requirements for FM Broadcasting Transmitters Low Power Announce	BETS-6 Issue 2	H
END			