Schedule of Accreditation

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Accredited to ISO/IEC 17025:2017

TÜV SÜD Limited (Trading as TÜV SÜD)

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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 Octagon House Concorde Way Segensworth North Fareham Hampshire PO15 5RL	**Local contact** Mr Mark Jenkins Tel: +44 (0)1489 558258/558100 Fax: +44 (0)1489 570586 Email: mark.jenkins@tuv-sud.co.uk Website: www.tuv-sud.co.uk	**Testing:** Environmental EMC Radio Electrical Safety	A
Address Snitterfield Road Bearley Stratford-upon-Avon Warwickshire CV37 0EX	**Local contact** Mr John Laydon Tel: +44 (0)1789 731155 Fax: +44 (0)1789 731264 Email: john.laydon@tuv-sud.co.uk Website: www.tuv-sud.co.uk	**Testing:** EMC Radio Electrical Safety	B
Address TUV SUD BABT Octagon House Concorde Way Segensworth North Fareham Hampshire PO15 5RL	**Local contact** Mr Mark Jenkins Tel: +44 (0) 1489 558258/558100 Fax: +44 (0) 1489 570586 Email: mark.jenkins @tuv-sud.co.uk Website: www.tuv-sud.co.uk	**Administration:** Customer Services	- No Accredited Testing Activities

Site activities performed away from the locations listed above:

Location details		Activity	Location code
Any customer premises	**Local contact** Mr Mark Jenkins Tel: +44 (0)1489 558581/558100 Fax: +44 (0)1489 570586 Email: mark.jenkins@tuv-sud.co.uk Website: www.tuv-sud.co.uk	EMC Radio Electrical Safety	E

DETAIL OF ACCREDITATION

TÜV SÜD Product Service, is accredited for a flexible scope in the areas of EMC, Radio, Electrical Safety and Environmental testing, which enables them to establish new and amended test methods, modification of existing methods and include newly revised or technically equivalent methods to conduct the activities detailed below, in accordance with their documented in-house laboratory procedure LP083 and UKAS Publication LAB 39.

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:-	**1 ENVIRONMENTAL TESTS**		
Aerospace Structures, Materials and Equipment Agricultural Equipment Computers and Peripherals Dangerous Goods Domestic Appliances Electrical/Electronic Components, Connectors and Products Electro-Mechanical Devices Large Shipping Cases Loaded Containers Marine Equipment Medical Devices Message Signs Mining Equipmant Missiles, Missile Sub-Assemblies and Components Motor Vehicle Accessories and Components Office Equipment Packages and Packaging Material Pressure Vessels Radar Equipment Radio and Television Equipment Railway Equipment, Including Signalling Trackside and Rolling Stock Safety Appliances and Equipment Satellites and Sub-Assemblies Security Devices and Alarms	**1.1 Vibration Types** Sinusoidal (swept, stepped and dwell), Broad Band Random, Mixed Mode Vibration as follows, Fixed and Swept Sine Tones or Narrow Bands -on- Broadband Random Gun Fire (pulsed Mixed Mode). Sine-on-Random-on-Random Imported Time Histories (road load data) Up to 10 sine or narrow band tones can be superimposed on a random background either harmonically related or in unrelated groups. Common Analysis Results that accompany testing as follows Time Histories Amplitude Frequency Response Magnitude & Phase Coherence Vibration Control - Combination of up to 48 Control Monitor/ Measurement Channels	**Selection of Generic Vibration Test and Measurement Standards with levels that can be met on our test machines** EN 60068-2-6: 2008 IEC 60068-2-6:2007 EN 60068-2-64:2008 IEC 60068-2-64:2008 IEC 60068-2-59:1990 IEC 60068-2-80:2005 EN 50155:2017	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	1 ENVIRONMENTAL TESTS (cont'd)		
Continued from page 3	**1.1(a) Electromagnetic Vibration Test Machines with Slip Tables** and Optional Temperature Conditioning during Vibration, using a selection of chambers that are all capable of operating with slip tables		A
Shipping Containers and Systems Traffic Signals and Signs, Static and Portable Unit loads Unitised Loads Weapons and Sub-Assemblies	**Electromagnetic Vibrator - Largest**	**Selection of Specifications with tests that are achievable on our electromagnetic shakers**	A
Variable Message Signs Fixed Vertical Road Traffic Signs Retro-reflective signs Non retro-reflective signs	Frequency Range: 2 Hz to 2 kHz Max Displacement: ± 25mm Max Acceleration -	EN 300 066:V1.3.1:2001 RTCM 11000.2:2002 Section A5 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Section 8.7	
Trans-illuminated signs Externally illuminated signs	70 g (load and frequency dependent) Max Payload: 5000 kg Slip Table 1 size: 1.5m x 1.5m	IEC 61097-2:2008 RTCM 11010.2:2012 Test A6	
	Slip Table 2 size 0. 95m x 0.67m Peak Thrust: 147 kN	BS 3G 100-2.3.1:1969 DEF STAN 00-35 (Part 3) Issue 4:2006 Test M1 MIL-STD 810 up to version G: Methods 514 and 528	
	(Sinusoidal) RMS Thrust: 151 kN (Random) Temperature Conditioning:	MIL-STD 167-1A: 2005 Type I	
	+ 80 °C; - 55°C Largest Chamber Size: 2.5 x 2.8 x 1.9m Smallest Chamber Size: 0.4 x 0.4 x 0.4m	EN 300 019 Part 2:2003-09 UN38 Test T3 IEC 60068-2-53:2010 RTCA DO 160:up to version G Section 8 RTCM 11901.1:2012 Section 8 EN 300 225 V1.4.1: 2004-12 sections 7.5 and 11.2.2	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **Electromagnetic Vibrator – Smallest** – cont'd		A
	Frequency Range: 2 Hz to 3 kHz Max Displacement Max Displacement: ± 25mm Max Acceleration 110g (load and frequency dependant) Max Payload – 600kg Slip Table size 0.75m x 0.75m Peak Thrust: 35 kN (Sinusoidal & Random) Temperature Conditioning Max Temperature: + 80°C Min Temperature: - 55°C Largest Chamber Size: 1.5m x 1.5m x 0.9m Smallest Chamber Size 0.4m x 0.4m x 0.4m	GAM-E.G. 13B:April 1997 Method 42: Section 4.2.1.6 Procedure 1 MIL-STD 202G:Methods 201, 204 and 214 EN 54-4:1998 EN 54-16:2008 EN 61373: 2010 BRB/LU RIA 20:1995, Clause 9.0 EN 300 019 Part 1 – 7 inclusive HD 638 S1:2001 +A1: 2007 TR 2130C:2002, Clause 3.8, 5.2 AECTP 400 Methods 401, 405 & 420	A
	1.1(b) Single Axis Hydraulic Test Machine with optional temperature preconditioning Frequency Range: 2 Hz to 200 Hz Max Displacement: ± 50mm Peak Thrust: 27 kN (Sinusoidal) RMS Thrust: 21 kN (Random) Max Acceleration: 7 g vertical axis only (load and frequency dependent) Max load: 1360 kg Table Size: 1.2 x 2.1 m Temperature Preconditioning: + 100 °C, - 55°C (unit size 1.m x 2.0m)	**Selection of Specifications with tests that are achievable on our electro-hydraulic shaker** ISO 10055:1996 ASTM D999-08 ASTM D4728-06 ASTM D3580-95 ISTA Series 1, 2 & 3	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.2 Shock and Bump	**Selection of Specifications with tests for Gravity Shock Machines**	A
	1.2(a) Using Gravity Shock Machine with optional temperature pre-conditioning		
	Max Duration: 60 msec (load dependent) Max Footprint: 1.2 m x 2.1m Classical Shock Pulse Shapes: Half Sine, Trapezoidal and Sawtooth Temperature Preconditioning: + 100 °C, - -55 °C for Sample Size 1.2 x 2.1m	RTCA DO 160:up to version G Section 7 ASTM D4169-09 ASTM 5487-98 BRU/LU RIA 20:1995 Def Stan 00-35 Part 3 Issue 4:2006 Test M3 IEC 60068-2-27:2008 MIL-STD 202G: Method 213 E1A 364 Rev E: 2008 MIL-C-38999:4.7.23.1 version J MIL-STD 810 up to version G Method 516 Procedures I, II, III, and V	A
	1.2(b) Vibrator Induced		
	Shock & Bump with Optional Temperature Conditioning during Shock & Bump, using a selection of chambers that are all capable of operating with slip tables	**Selection of Specifications with tests for Vibrator induced Shock & Bump**	A
	All classical shock pulse shapes plus synthesised shock (SRS) and bump pulse shapes, simulating measured Conditions Max Thrust: 151 kN Max Displacement: ± 25 mm Max Velocity: 1.7 m/sec	HD 638 S1:2001 +A1:2007 EN 300 066:V1.3.1:2001 ISO 10055:1996 RTCA DO 160:up to version G Section 7 UN38 T4 TR 2130C:2002, Clause 4.5 MIL-STD 810 up to version G Method 519 Procedures I ,II and III EN 300 019 Part 2:2003	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.2(b) Vibrator Induced Shock & Bump** (cont'd) Temperature Conditioning: + 80 °C; - 55°C Largest Chamber Size: 2.5 x 2.8 x 1.9m Smallest Chamber Size; 0.4 x 0.4 x 0.4m 4000 kg severity: 5 g, 30 ms half sine 350 kg severity: 40 g, 11 ms half sine Max Limit Horizontal, Load on Slip Table 3500 kg severity: 5 g, 30 ms half sine 100 kg severity: 40 g, 11 ms half sine	Issue 4:2006 Test M3, M6, and M12, Def Stan 00-35 Part 3 Issue 4: 2006 Test M3, M6 and M12 MIL-STD 810 up to version G Method 516 Procedures I, II, III, and V TR 2130C:2002, Clause 4.15 RTCM 11000.2:2002 Test A6 EN 61373:2010, Clause 10 RTCM 11010.2:2012 Test A7 AECTP 400 Methods 403, 417, and 419 EN 50155:2017	A
	1.2(c) Shock/Impact with Inclined Plane Max Load: 1360 kg Max Size of Impact Face: 1.8 m x 1.5 m (h) Max Velocity: 10 km/h Half Sine Pulse : 30g 18ms at 1000kg load	**Specifications for the Inclined Plane** AECTP 400 Method 416 ASTM D880-92 ASTM D4169-09 ISTA Series 1, 2 and 3 DEF STAN 00-35 (Part 3) Issue 4:2006, Test M3 and M5 (10^{o} incline) IEC 60068-2-27:2008	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.3 Drop, Topple and Stability: with Optional Temperature Preconditioning	**Specifications for Drop & Topple**	A
	Lifting limitations Crane 5000kg Forklift 2000kg Safe Working Size – 2m x2m x2m Temperature Preconditioning +100ºC - -55ºC	IEC 60068-2-31:2008 EN 60068-2-31:2008 HD 638 S1:2001 +A1:2007 DEF STAN 00-35 (Part 3) Issue 4:2006 Tests M4 and M5 MIL-STD 810 up to version G Method 516 Procedure IV TR 2130C:2002, Clauses 4.9, and 4.11 RTCM 11000.2:2002 Section A8.1 RTCM 11010.2:2012 Test A9 IEC/EN 60945: 2002 inc. Corrigendum 1: 2008, clause 8.6 (ex water) ASTM D4169-09 ASTM D5276 ISTA Series 1, 2 and 3 AECTP 400 Method 414 Proc II, and III RTCM 11901.1:2012 Section 8 EN 300 225 V1.4.1: 2004-12 section 7.4 EN 300 720-1 V1.3.2 clause 7.3	
	Stability	**Specifications for Stability**	A
	Max Load: 1360 kg Max Footprint: 1.5 m (w) x 1.5 m (d) x 2.3 m (h) Max Tilt Angle: 90 degrees	ASTM D6179 EN 60950-1:2006+A1:2010 Section 4.1	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.4 Free Fall** with Optional Temperature Preconditioning Max Mass: 1000 kg Max Size: 2 x 2 x 2 m Max Height: 4 m Pre-conditioning Max temperature +100°C Min temperature -55°C	**Specifications for Free Fall** IEC 60068-2-31:2008 AECTP 400 Method 414 Proc I MIL-STD 810 up to version G Method 516 Procedure IV DEF STAN 00-35 (Part 3) Issue 4:2006 Tests M4 and M5 RTCM 11000.2 v2.1:2001 RTCM 11010.2:2012 Test A9 ASTM D4169-09 ASTM D5276 ISTA Series 1, 2 and 3 EN 300 019 Part 2 (2003-09) IEC/EN 60945: 2002 inc. Corrigendum 1: 2008,.clause 8.6 (ex water) TR 2130C:2002, Clauses 4.9, and 4.11	A
	1.5 Bounce with Optional Temperature Conditioning during testing Max Mass: 113 kg Max Size: 1.76m x 0.6m x 1m high Max Temperature: + 80°C° Min Temperature: -55°C Max Chamber Size 0.6m x 0.7m x 1m	**Specifications for Bounce** DEF STAN 00-35 (Part 3) Issue 4:2006, Test M11 IEC 60068-2-55:1987 MIL-STD 810 up to version G Method 516 Procedure II AECTP 400 Method 406	A
	1.6 Lifting (Packages and Containers) Max Height (Crane): 12 m Max Mass (Crane): 5000 kg (Fork Lift Truck): 2250 kg	**Specifications for Lifting** DEF STAN 00-35 (Part 3) Issue 4:2006, Test M15 AECTP 400 Method 409	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.7 Static Load** (Stacking) and Compression Compression Machine with Automatic Load & Displacement Control : Max Load: 13,600 kg Max Compression: 150 mm Floating or Fixed Platten Max Height of Test Item: 1.9 m Max Footprint: 1.5 m x 1.5 m Compression with Weights: 4000 kg weight combination	**Specifications for Stacking** DEF STAN 00-35 (Part 3) Issue 4:2006, Test M16 ASTM D5169-09 ASTM D642-00 ISTA Series 1, 2 and 3 AECTP 400 Method 410	A
	1.8 Bending Max Load: 4000 kg	**Specifications for Bending** DEF STAN 00-35 (Part 3) Issue 4:2006, Test M17 AECTP 400 Method 411 EN 12899-1:2007 Clause 5.4.4	A
	1.9 Racking Max Mass: 4000 kg	**Specifications for Racking** DEF STAN 00-35 (Part 3) Issue 4:2006, Test M18 AECTP 400 Method 412	A
	1.10 Reliability Demonstration Burn in, stress screening Temperature: Max Size: 1.0 x 1.0 x 0.9m Max Temperature: + 90°C Min Temperature: - 65°C Average Rate of Change: 10°C/min	**Specifications for Reliability test** Mil Hbk 781: 1996	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.11 Low Temperature	**Selection of Specifications with tests that are achievable in our climatic chambers**	A
	Min Temperature: - 65°C Largest Chamber Size: 4.9 m x 6.0 x 4.0m Smallest Chamber Size 1.5m x 1.5m x 1.5m	EN 60068-2-1:2007 IEC 60068-2-1:2007 BS 3G 100-2.3.2:1970 AECTP 300 Method 303 EN 50556:2011 DEF STAN 00-35 (Part 3) Issue 4:2006, Test CL4, CL5 MIL-STD 810 up to version G: Method 502, Procedures I, II and III RTCA DO 160: up to version G: Section 4 TR 2130C:2002, Clause 3.3 IEC/EN 60945:2002 inc. Corrigendum 1: 2008,Section 8.4 EN 50125-3:2003 Section 4.3 RTCM 11010.2:2012 Section A5 EN 50155:2007 Para 4.1.2 EN 50155:2017 EN 300 019 Part 2: 2003-09 EN 300 066:V1.3.1:2001 HD 638 S1:2001 + A1:2007 RTCM 11901.1:2012 Section 8 EN 300 225 V1.4.1: 2004-12 sections 7.6.4 and 11.2.3.4 EN 300 720-1 V1.3.2 clause 5.5	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.12 High Temperature	**Selection of Specifications with tests that are achievable in our climatic chambers**	A
	Max Temperature: + 200°C Max Chamber Size: 450 x 480 x 650 mm Max Temperature: + 150°C Max Chamber Size: 1.48 x 1.48 x 1.48m Max Temperature: + 120°C Max Chamber Size: 2.5 x 2.3 x 2.7m Max Temperature: + 100°C Max Chamber Size: 5.0 x 6.0 x 4.0m	IEC 60068-2-2:2007 EN 60068-2-2:2007 BS 3G 100-2.3.2:1970 DEF STAN 00-35 (Part 3) Issue 4:2006, Test CL1 MIL_STD 810 up to version G Method 501, Procedures I, II and III AECTP 300 Method 302 RTCA DO-160 up to version G Section 4 TR 2130C:2002, clause 3.2 RTCM 11901.1:2012 Section 8 HD 638 S1:2001 +A1:2007 RTCM 11010.2:2012 Section A3 RTCM 11000.2:2002 Section A3 EN 300 066:V1.3.1:2001 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Clause 8.2 EN 50155:2007 Para 4.1.2 EN 50155:2017 EN 300 019 Part 2:2003 HD 638 S1:2001 + A1:2007 EN 300 225 V1.4.1: 2004-12 sections 5.3, 5.4, 5.5, 7.6.2 and 11.2.3.2 EN 300 720-1 V1.3.2 clauses 7.4.2 and 5.5	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.13 Change of Temperature (Temperature Shock and Temperature Variation) **Temperature Shock** – two chamber method	**Specifications for Temperature Shock** DEF STAN 00-35 (Part 3) Issue 4 :2006, Test CL 14 Procedure A	A
	Small Products Max Temperature: 200°C Min Temperature: - 65°C Max Chamber Size: 450 x 480 x 650 mm	RTCM 11010.2:2012 Section A10 MIL STD 202G:Method 107 MIL STD 810 up to version G: Method 503 EN 300 066:V1.3.1:2001 EN 300 225 V1.4.1: 2004-12 section 7.9 IEC/EN 60945: 2002 inc. Corrigendum 1: 2008, Clause 8.5 TR 2130C:2002, Clause 3.4	
	Large Products Max Temperature:+71ºC Min Temperature: -46ºC Max Product Size 1.5m x 1.5m x 1.5m with max weight 1000kg	HD 638 S1:2001 + A1: 2007 AECTP 300 Method 304 RTCM 11000.2:2002 Section A11 HD 638 S1:2001 + A1:2007 RTCM 11901.1:2012 Section 8	
	Temperature Variation	**Specifications for Temperature Variation**	
	Chamber Size 1.48m x 1.48m x 1.48m Temperature Extremes: +100ºC / -60ºC @ 10ºC/min average	RTCA DO 160 up to version G: Section 5 DEF STAN 00-35 (Part 3) Issue 4 :2006, Test CL 14 Procedure B	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.14 Damp Heat**	**Selection of Specifications with tests that are achievable in our humidity chambers**	A
	Humidity Range: 15% to 95% RH Temperature: +10°C to +70°C Max Chamber Size: 5.0 x 6.0 x 4.0 m Additional levels: 25°C, 97% RH; 85°C, 85% RH Humidity Range 10% to 97% RH Temperature: +5°C to +70°C	EN 60068-2-30:2005 IEC 60068-2-78:2001 IEC 60068-2-30:2005 BS 3G 100-2.3.7:1972 EN 300 019 Part 2:2003 RTCA DO 160 up to version G: Section 10.3.1 - condensation Def Stan 00-35 Part 3 Issue 4:2006 Tests CL6 and CL17 (induced temperatures only) TR 2130C:2002, Clause 3.5 HD 638 S1:2001 + A1:2007 IEC 60945:2002 inc. Corrigendum 1: 2008, Clause 8.3 MIL-STD 810 up to version G: Method 507 RTCM 11901.1:2012 Section 8	
	Walk in Chamber Additional levels: 25°C, 97% RH; 85°C, 85% RH Humidity Range 15% to 97% RH Temperature: +5°C to +85°C Small chamber Size: 1.5m x 1.5m x 1.5m Note: Traceable humidity tests to dew points of 81°C	MIL-STD 202G:Methods 103 and 106 RTCA DO 160 up to version G: Section 6 EN 300 066:V1.3.1:2001 HD 638 S1:2001 + A1:2007 AECTP 300 Method 306 RTCM 11010.2:2012 Section A4 RTCM 11000.2:2002 Section A4 EN 300 225 V1.4.1: 2004-12 sections 7.6.3 and 11.2.3.3 EN 300 720-1 V1.3.2 clause 7.4.3	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS (**cont'd) **1.15 Low Pressure/Temperature/ Humidity Combined** Max Temperature: + 90°C Min Temperature: - 65 °C Min Pressure: 4.0kN/m² Steam Injection above 40 kN/m² Max Size: 900mm diameter x 840mm	**Selection of Specifications with tests that are achievable in our altitude chambers** IEC 60068-2-38:2009 IEC 60068-2-39:1999 IEC 60068-2-39:2015 IEC 60068-2-40:1976 including Amendment 1 IEC 60068-2-41:1976 including Amendment 1 IEC 60068-2-61:1991 EN 60068-2-38:1999 EN 60068-2-39:1999 EN 60068-2-39:2016 EN 60068-2-40:2000 EN 60068-2-41:2000 EN 60068-2-61:1994 AECTP 300 Method 317 RTCA DO 160 up to version G Section 4 MIL-STD 810 up to version G: Method 500 Proc I, II and III AECTP 300 Method 312 Proc II andIII Def Stan 00-35 Part 3 Issue 4:2006 Tests CL9 (Rapid), CL11 CL12, CL13 & CL20 BS 3G 100-2.3.2:1970 BS 3G 100-2.3.4:1972	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS (**cont'd)		
	1.16 High Pressure	**Selection of Specifications with tests that are achievable in our over-pressure chamber**	A
	High Pressure Air only: Temperature: Ambient Max Pressure: 549 kN/m^2 Max Chamber Size: 600 mm diameter x 750 mm High Pressure Air over Water: Temperature: Ambient Max Pressure: 680 kN/m^2 Max Chamber Size: 600 mm diameter x 750 mm Maximum water depth in the tank - 650mm See also 1.18	DEF STAN 00-35 (Part 3) Issue 4:2006, Test CL 15 EN 300 066:V1.3.1:2001 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Clause 8.9	
	1.17 Low Air Pressure only (see also 1.15)	**Selection of Specifications with tests that are achievable in our altitude chambers**	
	Min Pressure: 4.0 kN/m^2 Max Size: 900 x 800mm	IEC 60068-2-13:1983 EN 60068-2-13:1999 BS 3G 100-2.3.2:1970 DEF STAN 00-35 (Part 3) Issue 4:2006, Tests CL 21 AECTP 300 Method 312Proc I MIL-STD 202G:Method 105 EN 300 019 Part 2:2003	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.18 Tests for Protection against effects of Water	**Selection of Specifications with tests that are achievable in our water test facilities**	A
	Immersion Tests Immersion Tank Sizes: 1 x 1 x 2.2 m (h) 1.45 m x 0.85 m diameter 1.75 m x 1.48 m diameter High Pressure Air over Water: Temperature: Ambient Max Pressure: 680 kN/m^2 Max Chamber Size: 600 mm diameter x 750 mm Maximum water depth in the tank 650mm Maximum equivalent sea water depth – 55m	**Immersion Standards** AECTP 300 Method 307 MIL-STD 202G:Method 104, DEF STAN 00-35 (Part 3) Part 4 :2006 Test CL29 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Clauses 8.8, 8.9 and 8.11 RTCM 11010.2:2012 Section A11 RTCM 11000.2:2002 Section A9 MIL-STD 810 up to version G: Method 512 Procedure I IEC 60068-2-17:1994 Test Qf EN 300 066:v1.3.1:2001 section 6.8 EN 300 225 V1.4.1: 2004-12 section 7.8 RTCM 11901.1:2012 Section 8 EN12245:2009 Section 5.2.7 Test 7	
	Drip Tests: 0.8 m x 0.8m test area 25mm nozzle matrix 350l/m^2/hr nominal drip rate 200mm nozzle matrix - 280l/m^2/hr nominal drip rate	**Drip Test Standards** BS 3G 100-2.3.11:1973 Test B DEF STAN 00-35 (Part 3) Part 4:2006 Test CL28 MIL-STD 810 up to version G: Method 506 Procedure III RTCA DO 160:up to version G: Section 10.3.2	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd)		
	1.18 Tests for Protection against effects of Water (cont'd)	**Selection of Specifications with tests that are achievable in our water test facilities**	A
	Rain Tests: 3m x 3m x 3m test area 200 mm/hr deposition rate	**Rain Test Standards** DEF STAN 00-35 (Part 3) Part 4 :2006 Test CL27 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Section 8.8 EN 300 019 Part 2:2003-09 MIL-STD 810 up to version G: Method 506 Procedure I (not blown) AECTP 300 Method 310	
	High Pressure Water Jet	RTCM 11901.1:2012 Section 8 BS 3G 100-2.3.11:1973 Test A RTCA DO 160:up to version G Section 10.3.4	
	Ingress Protection (IP) Tests including drip, water spray and immersion Note for Drip & Immersion tests, see above for facility sizes	**IP Standards**	A
	IP X1 – drip rig and 1rev/min turntable (max weight 30kg) IPX2 – drip rig IPX3 – spray with counterbalance	EN 60529:1992, IPX1 to IPX8 inclusive IEC 60529:1989 + A1:1999 IPX1 to IPX8 inclusive EN 60529: 1992 + A2:2013, excluding IPX9 IEC 60529:1989 + A2:2013 excluding IPX9	
	IPX3 – oscillating tube diameters1200mm, 800mm & 400mm IPX4 – spray without counterbalance IPX5 – 6.5mm diameter nozzle IPX6 – 12.5mm diameter nozzle IPX7 & 8 – Immersion Tanks (see above)	EN 60068-2-18:2001 Test Ra, Rb and Rc HD 638 S1:2001 + A1:2007	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.19 Corrosion** Max Size: 920 x 920 x 920 mm Various concentrations of sodium chloride and other corrosive solutions	**Selection of Specifications with tests that are achievable in our salt corrosion chamber** IEC 60068-2-11:1981 IEC 60068-2-52:1996 EN 60068-2-11:1999 EN 60068-2-52:1996 BS 3G 100-2.3.8:1972 DEF STAN 00-35 (Part 3) Issue 4:2006 Test CN 2 EN 300 066:V1.3.1:2001 EN 300 225 V1.4.1: 2004-12 sections 7.7 and 11.2.4 AECTP 300 Method 309 IEC/EN 60945:2002 inc. Corrigendum 1: 2008, Section 8.12 MIL-STD 810 up to version G: Method 509 MIL-STD 202G:Method 101 RTCA DO 160:up to version G Section 14 ASTM B117-07 RTCM 11000.2:2002 Section A7 RTCM 11010.2:2012 Section A8 EN ISO 9227:2012 RTCM 11901.1:2012 Section 8 EN 50155:2017	A A
	1.20 Icing/Freezing Rain Test **Deposition of Glaze Ice or Rime Ice** Min Temp: - 40°C Max Chamber Size: 5.0 x 6.0 x 4.0m	**Specifications for Icing & Freezing Rain** DEF STAN 00-35 (Part 3) Issue 4:2006, Test CL10 RTCA DO 160 up to version G Section 24 MIL-STD 810 up to version G: Method 521 AECTP 300 Method 311	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 3 & 4	**1 ENVIRONMENTAL TESTS** (cont'd) **1.21 Rapid Decompression** Chamber Size 900mm x 800mm Temperature: Ambient	**Specifications for Rapid Decompression** DEF STAN 00-35 (Part 3) Issue 4:2006, Test CL 9 MIL STD: 810 up to version G Method 500 Procedure III RTCA DO-160 up to version G section 4.6.2	A
	1.22 Fluid contamination Oil Resistance	**Selection of Specifications with tests that are achievable in our fluid contamination facilities** ETSI EN 300 066:v1.3.1:2001 section 6.12 ETSI EN 300 225 V1.4.1:2004-12 section 7.11	A
Electromechanical and Electronic Equipment in the following main categories Tri-Service Military Civil Aviation Transport Industrial Process Information Technology Equipment Electrical Equipment for Operation in Residential and Light Industry Environments Industrial Apparatus Operating at Less than 1000V ac or from Special Power Sources Connected to Public, Low-Voltage Mains Supplies Aeronautical Transmitting Equipment Aeronautic Components and Equipment	**2 EMC TESTS[1]** 2.1 Conducted Emissions DC to 1 GHz 2.2 Conducted Susceptibility Power, Control and Signal lines 2.3 Radiated Emissions Electric Field: 10 kHz to 60 GHz 2.4 Radiated Emissions Magnetic Field: 20 Hz to 30 MHz 2.5 Radiated Susceptibility Electric Field: peak Pulse modulated Field Strength of: 10 kHz to 200 MHz: >300 V/m 200 MHz to 400 MHz: 400 V/m 400 MHz to 1 GHz: >600 V/m 1 GHz to 18 GHz: >1 kV/m 18 GHz to 40 GHz: >200 V/m	**<u>Military Specifications</u>** AERITILIA D-PT070A20, Issue B BAe-WAS-SP-TOR-EMC034: July 1987, Except Test RE1 DG SHIPS 250B:1981 DEF STAN 61-5, Parts 2, 3, 4, and 6 DEF STAN 59-41:Part 3: Issue 2, Section 1 DEF STAN 59-41:Part 3: Issue 2, Section 2, except DCS-01.2 and DRE 01.2 DEF STAN 59-41:Part 3: Issue 3, Amendment 4, 25 July 1991 DEF STAN 59-41:Part 3: Issue 4, Except Supplements P and Q DEF STAN 59-41:Part 3: Issue 5, Except Supplements P and Q	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Continued from page 19	**2 EMC TESTS** (cont'd)	**Military Specifications** (cont'd)	A
Aerospace Structures Circuit Breakers and Switches Compressors Construction Plant and Equipment Construction Products Generators: Power IT Equipment Lamps: Electric Lawnmowers Medical Equipment Mining Equipment Components Missile Components Missiles: Guided Missiles: Unguided Optical and Photometric Equipment Pumps Radar Equipment Satellites and Sub-Assemblies Security Devices and Alarms Security Equipment Sonar Equipment Tools: Machine Toys Transformers: Electrical Video Equipment	2.6 Radiated Susceptibility Magnetic Field: DC to 35 MHz 2.7 Bulk Current Injection Susceptibility: 50 kHz to 400 MHz 2.8 Spike and Surge Susceptibility 2.9 Discontinuous Interference 150 kHz to 30 MHz 2.10 AC Mains Interference Frequency and Voltage Variation 2.11 Electrostatic Discharge AC, DC Power Lines, Signal and Control Lines 2.12 Fast Transient Bursts on AC, DC Power Lines, Signal and Control Lines 2.13 Magnetostatic Field Susceptibility 3200 A/m, Max test sample size 1.6 m^3 Coil diameter: 2.34 m 2.14 Magnetostatic Field De-perming level -3200 A/m Max sample size 1.6 m^3 Coil diameter: 2.34 m 2.15 Compass Safe Distance	DEF STAN 59-41 (Part 3) Issue 1, Section 3:2003, except Clauses 9.10, 9.11, 9.13, 9.18 and 9.19 DEF STAN 59-411 (Part 3) Issue 1:2007 DEF STAN 59-411 (Part 3) Issue 1:2007 plus Amendment 1:2008 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DEF STAN 65-1 (Part 4) Section 2, Harmonic Distortion only EH 101:Issue 3:June 1986 FS(F)442:1982 FS(F)457:Issue 2 FS(F)510:1984, Except ACS04 MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115 MIL-STD 1541:1973, Except RS 03, CS 03, CS 04, to 40 GHz and CS 06 MVEE 595:Issue 1 NWS 3:1981, including Amendments 1 to 4 SPE-J-000-E-1000, Issue 1 Except CS-EFA-6 and CS-EFA-7, limited to 18 GHz, LEMP-EFA-1, and NEMP-EFA-2 EN 2282:1992, Annex A EN 2282:1997 (Draft), Annex A BS 2G100:Part 2:Section 2: 1967 and Amendment 1 BS 3G 100-2.2:1972	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 19 & 20	**2 EMC TESTS** (cont'd) 2.15 Compass Safe Distance **(**cont'd)	**<u>Military Specifications</u>** BS 3G 100-3:1979 BS 3G 100-4.2:1980 EA98Q010J, except CSWA 10 MIL-STD 285 TS 1527: Issue 2 SP-P-90001 SP-P-90003, Except CS 03, CS 04, CS 05 all to 40GHz and RE1 SP-P-90-010:Issue 1:Nov 1995, Tests CE-TOR-1, CE-TOR-2, CE-TOR-3, CE-TOR-4, RE-TOR-1, CS-TOR-1, CS-TOR-2, CS-TOR-4, RS-TOR-1, RS-TOR-2, RS-TOR-3 SP-A-90203, Except RE1 PTARMIGAN Manual of Standards, Section 11, Issue 5 PTARMIGAN Manual of Standards, Section 20, Issue 3 Bowman Product Standard, Document 780609: September 2001, excluding BRE03, DRE03, BCS07 and BCS08 STANAG 1008:Edition 8, Harmonic Distortion only STANAG 4435:Edition 1, Excluding NRS02 Radiated Susceptibility 10 kHz to 40 GHz DOD-STD-1399 (Navy) Section 70-Part 1, Notice 1, Nov 1989 NES 1004 issue 2 Data Sheet 38 DEF STAN 08-123 Data Sheet 38 AECTP-500 Ed.2 AECTP-500 Ed.4	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 19 & 20	**2 EMC TESTS** (cont'd) 2.15 Compass Safe Distance (cont'd)	**Non-civil specifications** RTCA DO-160A, Sections 16, 18, 19, 20 and 21 RTCA DO-160C RTCA DO-160D:1997 Parts 15 to 22 and 25 RTCA DO-160E Sections 15 to 22 and 25 RTCA DO-160F Sections 15 to 25 excluding Section 20.6, 21.6, 23 and 24 but including In-House Method EMC-TP-061 RTCA DO-160G Sections 15 to 25 excluding Section 20.6, 21.6, 23 and 24 but including In-House Method EMC-TP-061 MIL-STD 704E MIL-STD 704F IEC 60645-5 (Draft), Stripline to 30 MHz only D10100:1987(BT), Except paragraph 5.4.2.1 SAMA Standard PMc 33.1:1978 IBM C-S 2-0001-02:1986/10 RIA 18:1990 Airbus ABD 0013, Issue D, Appendix 1 Boeing D6-16050-2, Rev A except paragraphs 7.4 and 7.4.3 Boeing D6-16050-4 Rev D, Boeing D6-16050-4 Rev F Boeing D6-16050-5, Rev C except Paragraphs 7.2.1 and 7.3.2 Boeing D2 00Z001 Rev D, except Paragraphs 12.7.5.3.2 and 12.7.5.4.2 Boeing D6-44588 Rev AA, except paragraph 3.5.3.9 Boeing 787B3 0147 Rev C Lloyds Register of Shipping: 1985 Airbus ABD-007:Issue E:1988	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 19 & 20	**2 EMC TESTS** (cont'd) 2.15 Compass Safe Distance (cont'd)	Non-civil specifications (cont'd) Airbus ABD-0100.1.2 Issue E, Clauses 3.2, except 3.2.1; 3.3, 3.4 and 3.5 Airbus ABD-0100.1.8 Issue D Airbus ABD-0100.1.8 Issue E Table C (excluding 50, 100 and 400µs sections of Test 5)	A
	2.16 Shielding Effectiveness 1 to 10 GHz	In-House Method TP-058	A
	EMC TEST FACILITIES Shielded Enclosures: (Semi-anechoic and ferrite lined) Including 3 m Alternate Open Area Test Site Maximum Chamber Size: 10 x 7 x 6 m Maximum Test Sample Size: 6 x 3.3 x 3.8 m Maximum Weight: 4000 kg Power Provisions: Single phase supplies: 240 V, 50 Hz, 16A 240 V, 50 Hz, 32A 440 V, 50 Hz, 64A 115V, 60 Hz, 40A 3 phase supplies: 220V, 60 Hz, 75A DC 250V, 60A		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Information Technology Equipment Electrical Equipment for operation in residential and light industrial environments Industrial Apparatus Operating at Less than 1000 V AC or from Special Power Sources Connected to Public, Low-Voltage, Mains Supplies Aerospace Components and Equipment Aerospace Structures Agricultural Equipment Batteries and Cells Circuit Breakers and Switches Compressors Computers and Peripherals Construction Plant and Equipment Construction Products Domestic Appliances: Electrical Electrical/Electronic Components Electrical/Electronic Connectors Electrical/Electronic Products Electronic Products: Digital Electro-Mechanical Devices Enclosures for Electrical Equipment Fans Filters and Filter Media Fire Fighting and Detection Equipment Generators: Electrical Generators: Power Generators: Welding	**3 CIVIL EMC TESTS** 3.1 Conducted Emissions Continuous Emissions: DC to 100 MHz Interference: 0.15 MHz to 30 MHz Conducted Emissions (Antenna input) 30 MHz to 1 GHz	BS 800:1988 EN 55011:1991 EN 55011:1998 including Amendment A1:1999 and Amendment A2: 2002 EN 55011:2007 including Amendment A2:2007 EN 55011:2009 EN 55011:2009 including Amendment 1:2010 EN 55013:Issue 1:1990 including Amendment 1:1993 Amendment 12:1994 Amendment 13:1996 Amendment 14:1999 EN 55013:2001 including Amendment 1:2003 and Amendment 2:2006 excluding Tables 6 and 7 J 55013: 2010 J 55013:1998 EN 55014:1993 EN 55014-1:1997 EN 55014-1:2000 EN 55014-1:2000 including Amendment A1:2001 EN 55014-1:2000 plus Amendment A2:2002 EN 55014-1:2006 including Amendment A1:2009 excluding use of EN 55015, EN 61000-4-20 method and table B.3 EN 55014-1:2006 + A2:2011 excluding use of EN 55015, EN 61000-4-20 method and table B.3 CISPR 11, ed 1:1990 CISPR 11, ed 4:2003 CISPR 11, ed 4.1:2004 CISPR 11. ed 5:2009	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Continued from Page 24	**3 CIVIL EMC TESTS** (cont'd)		
Hydraulic Equipment and Fittings Industrial Trucks Instruments: Indicating or Recording Insulating Materials: Electrical IT Equipment Lamps: Electric Lawnmowers Lifting Gear Luminaires Magnetic Materials Marine Equipment Measuring Equipment Mechanical Products and Plant Medical/Dental Equipment Message Signs Micro-Electronic Circuits and Components Mining Equipment Components Mining Plant and Equipment Motor Vehicle Accessories and Components Motor Vehicles Motors: Electrical Office Equipment: Electrical Optical and Photometric Equipment Plugs and Sockets: Electrical Power Supplies: Electrical Printed Circuit Boards Pumps	3.1 Conducted Emissions (cont'd)	CISPR 11, ed 5.1:2010 AS/NZS CISPR 11:2004 CISPR 12, ed 5:2001 CISPR 12, ed 5.1:2005 CISPR 13, ed 4.2:2006 CISPR 14:1993 CISPR 14-1:1997 CISPR 14-1:2000 CISPR 14-1:2005 CISPR 14-2:1997 CISPR 14-2, ed 1.1:2001 CISPR 14-2, ed 1.0 including Amendment 2:2008 EN 55015:2006 including Amendment A2:2009 Limited to LED Products EN 55022:1987 EN 55022:1994 including Amendment 1:1995 and Amendment 2:1997 EN 55022:1998* including Amendment 1:2000 Amendment 2:2003 & Corrigenda 1 and 2 * includes signal lines where standard ISN's and CDN's can be used EN 55022:2006 including Amendment A1 and Corrigendum 1 EN 60255-25:2000 EN 55022:2006 including Amendments A1 and A2 EN 55022:2010 inc Corrigendum 2011 CSA 108.8:1983 AS/NZS 3548:1995 BTR 2511: Issue 5 (except Section 3.3.1) MP-5 1986	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Continued from Pages 25 and 26	**3 CIVIL EMC TESTS** (cont'd)		
Radar Equipment Radio and TV Equipment Radiocommunications Equipment Recreational and Sporting Equipment Rescue Appliances/ Equipment Safety Appliances and Equipment Satellites and Sub-assemblies Security Devices and Alarms Security Equipment Smoke Detectors Sonar Equipment Structural Components and Fittings Switchboards: Electrical Tools: Machine Toys Transformers: Electrical Video Equipment Waste Handling Equipment Weapons and Sub-assemblies	3.1 Conducted Emissions (cont'd)	GSM 11.20:1993 Clauses 2.1.6.6 and 2.1.7.8 (excluding antenna measurements) GSM 11.21:1995 Clauses 2.1.6.6 and 2.1.7.8 (excluding antenna measurements) FCC CFR 47:Part 15:2017 Subparts B and C, excluding devices with transmit frequencies >10 GHz RSS-210 Issue 8 2010 + A1:2015 ANSI C63.4:1992 ANSI C63.4:2001 ANSI C63.4:2003 ANSI C63.4:2009 ANSI C63.4:2014 ANSI C63.10:2009 RSS-141:Issue 2:Feb 2010: (Clauses 4.5 and 6.4(b)) VCCI 27th Edition:2013 Lloyds Register LR1:1990 CNS 13438:1997 RTCM 110 EPIRB Sections A12 and A13:1987 AS/NZS 1053:1996 EN 300 132:V2.1.2:2003, Clause 4.9.1 only ICES-001, Issue 4:2006 ICES-003, Issue 6:2016 CISPR 25:ed 3:2008 excluding clauses 5, 6.5 & 6.6 FCC CFR 47 Part 18: 2016 RSS-216, Issue 2: 2016 ECE Regulation 10.03:2008 Annex 10 ECE Regulation 10.04:2012 Annex 10 ECE Regulation 10.05:2014 Annex 10, 19 and 20	A, B B A, B B B B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.2 Radiated Emissions Magnetic Field: 10 kHz to 30 MHz Electric Field: 30 MHz to 40 GHz Interference Power: 0.15 MHz to 300 MHz Effective Isotropic Radiated Power: 30 MHz to 40 GHz	BS 800:1988 EN 55011:1991 EN 55011:1998 including Amendment A1:1999 and Amendment A2: 2002 Excl clause 5.5.2 table 3a EN 55011:2007 including Amendment 2:2007 EN 55011:2009 EN 55011:2009 including Amendment 1:2010 EN 55013:1990 Amendment 12:1994 Amendment 13:1996 Amendment 14:1999 EN 55013:2001, including Amendment 1:2003 and Amendment 2:2006 excluding Tables 6 and 7 J55013: 2010 EN 55014:1993 EN 55014-1:1997 EN 55014-1:2000 EN 55014-1 including Amendment A1:2001 EN 55014-1 including Amendment A2:2002 EN 55014-1:2006 + A2:2011 excluding use of EN 55015, EN 61000-4-20 method and Table B.3 EN 55015:2006 including Amendment A2:2009 Limited to LED products CISPR 11, ed 1:1990 CISPR 11, ed 4:2003 CISPR 11, ed 4.1:2004 CISPR 11. ed 5:2009 CISPR 11, ed 5.1: 2010 AS/NZS CISPR 11:2004 CISPR 12, Ed 5:2001 CISPR 13, Ed 4.2:2006 CISPR 14:1993 CISPR 14-1:1997 CISPR 14-1:2000 MP-5 1986	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.2 Radiated Emissions (cont'd)	CISPR 14-1:2000 including Amendment 1:2001 and Amendment 2:2002	A, B
		EN 55022:1987	
		EN 55022:1994 including Amendment 1:1995 and Amendment 2:1997	
		EN 55022:1998, including Amendment 1:2000 Amendment 2:2003 & Corrigenda 1 and 2	
		EN 55022:2006	
		EN 55022:2006 including Amendment A1 and Corrigendum 1	
		EN 55022:2006 including Amendments A1 and A2	
		EN 55022:2010 inc Corrigendum 2011	
		97/24/EC Chapter 8	B
		95/54/EC Annexes VII and VIII	B
		2004/104/EC	B
		2006/28/EC	B
		ECE Regulation 10.02:1997 Annex 7 and 8	B
		ECE Regulation 10.03:2008 Annex 7 and 8	B
		ECE Regulation 10.04:2012 Annex 7 and 8	B
		ECE Regulation 10.05:2014 Annex 7 and 8	B
		EN 50498:2010	B
		CSA 108.8:1983	
		AS/NZS 3548:1995	
		GSM 11.20:1993 Clauses 2.1.6.6 and 2.1.7.8 (excluding antenna measurements)	
		CISPR 22, ed 3:1997	
		CISPR 22, ed 4:2003	
		CISPR 25, ed 3:2008 excluding clauses 5, 6.5 & 6.6	
		CISPR 22, ed 5.2:2006 excluding four pair ISN measurement	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.2 Radiated Emissions (cont'd)	AS/NZS CISPR 22: 2006 excluding four pair ISN measurement GSM 11.21:1995 Clauses 2.1.6.6 and 2.1.7.8 (excluding antenna measurements) FCC CFR 47:Part 15:2017 Subparts B and C, excluding devices with transmit frequencies >10 GHz RSS-210 Issue 8 2010 + A1:2015 ANSI C63.4:1992 ANSI C63.4:2001 ANSI C63.4:2003 ANSI C63.4:2014 RSS-141:Issue 2:Feb 2010: (Clauses 4.5 and 6.4(b)) VCCI: 27th Edition:2013 AS/NZS 1053:1996 CNS 13438:1997 RSS-133, Issue 6: 2013 ICES-001, Issue 4:2006 ICES-003, Issue 6:2016 FCC CFR 47 Part 18: 2016 RSS-216, Issue 2: 2016	B A, B B
	3.3 Conducted Immunity 20 Hz to 400 MHz RF Immunity Bulk Current Injection	ENV 50141:1993 ENV 50142:1994 IEC 801-6:Draft:1990	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.3 Conducted Immunity 20 Hz to 400 MHz (cont'd)	EN 61000-4-6:1996 including Amendment A1:2001 EN 61000-4-16:1998, Clause 6.1.3 EN 61000-4-16:2016, Clause 5.3 & 6.1.4 EN 61000-4-6:2007 including Corrigendum 1:2007 EN 61000-4-6:2009 EN 61000-4-6:2014 IEC 61000-4-6:ed 1:1996 IEC 61000-4-6:ed 2.1:2004 IEC 61000-4-6:ed 2.2:2006 IEC 61000-4-6:2003 including Amendment 1:2004 and Amendment 2:2006 IEC 61000-4-6 ed 3:2008 DS 5104:1987 BTR 2511:Issue 5 (except Section 3.3.1) ECE Regulation 10.03:2008 Annex 9 ECE Regulation 10.04:2012 Annex 9 ECE Regulation 10.05:2014 Annex 9	A, B B B B
	3.4 Radiated Immunity Magnetic Field: DC to 35 MHz Electric Field: 80 MHz to 1 GHz: >600 V/m 1 GHz to 18 GHz: >1 kV/m 18 GHz to 40 GHz: >200 V/m	ENV 50140:1993 IEC 60801-3:1984 IEC 60801-3:Draft 7 (65A/77BN) IEC 61000-4-3:ed1:1995 plus Amendment 1:1998 EN 61000-4-3:1996 including Amendment 1:1998 EN 61000-4-3:2002 including Amendment 1:2002 EN 61000-4-3:2006 including Amendment A1:2008 and Amendment A2:2010 IEC 61000-4-3:ed2:2002 including Amendment A1:2002	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.4 Radiated Immunity (cont'd)	IEC 61000-4-3:2002 Including Amendment 1:2002 IEC 61000-4-3:2006 (including Amendment A1:2007 and Amendment A2:2010 ENV 50204:1995 ISO 11452-2:1995 200 MHz to 18 GHz ISO 11452-1:2005 ISO 11452-2:2004 ISO 11452-4:1995 1 MHz to 400 MHz ISO 11452-4:2005 including Corrigendum 1:2009 excluding clause 7.6.2; Figure 2 and clause 8.3.2 ISO 11452-4:2011 excluding Clauses 6.2, 7.6.2 & E.1.2 ISO 11452-5:2002 SAMA PMC 33.1:1985 95/54/EC Annex IX 97/24/EC Annex 8 ECE Regulation 10.02:1997 Annex 9 ECE Regulation 10.03:2008 Annex 9 ECE Regulation 10.04:2012 Annex 9 ECE Regulation 10.05:2014 Annex 9 2004/104/EC 2006/28/EC EN 50498:2010	A, B B B B B B B B B B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.5 Mains Harmonics and Fluctuations: 0 to 2 kHz Limited to <16 Amps	EN 60555-2:1987 EN 60555-3:1987 including Amendment 1:1991 EN 61000-3-2:1995 EN 61000-3-2:2000 EN 61000-3-2:2006 including Amendment 2:2009 JIS 61000-3-2: 2011 EN 61000-3-2:2014 IEC 61000-3-2:ed3:2005 IEC 61000-3-2:ed3.2009 JIS C61000-3-2:2005 EN 61000-3-3:1995 including Amendment 1:2001 and Amendment 2:2005 EN 61000-3-3:2008 Limited to <16A supply EN 61000-3-3: 2013 IEC 61000-3-3:ed1:1994 including Amendment 1:2001 and Amendment 2:2005 IEC 61000-3-3 ed1.1:2002 IEC 61000-3-3 ed1.2:2005 IEC 61000-3-3 ed2:2008 ECE Regulation 10.05:2014 Annex 17 and 18	A, B B
	3.6 Immunity to Power Frequency Magnetic Field	EN 61000-4-8:1993 EN 61000-4-8:2010 IEC 61000-4-8:ed1:1993 including Amendment 1:2000 IEC 61000-4-8 ed 1.1:2001 IEC 61000-4-8 ed 2:2009 EN 61000-4-9:1993 IEC 61000-4-9:ed1:1993 IEC 61000-4-9 ed1.1:2001	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.7 Mains Surges and Transients	EN 61000-4-4:1995 including Amendment A1:2001 and Amendment 2:2001 EN 61000-4-4:2004 including Amendment A1:2010 and Corrigenda 2006 & 2007 EN 61000-4-4:2012 EN 61000-4-5:1995 including Amendment A1:2001 EN 61000-4-5:2006 EN 61000-4-5:2014 IEC 61000-4-4:ed1:1995 including Amendment A1:2001 and Amendment A2:2001 IEC 61000-4-4 ed 2:2004 IEC 61000-4-5:ed1:1995 including Amendment A1:2001 IEC 61000-4-5 ed 1.1:2001 IEC 61000-4-5 ed 2:2005 ISO 7637:Parts 1 and 2:1990 Except Pulse 1b, limited to level 1 and 2 only ISO 7637-2:2004 ISO 7637-2:2011 ECE Regulation 10.03:2008 Annex 10 ECE Regulation 10.04:2012 Annex 10 ECE Regulation 10.05:2014 Annex 10, 21 and 22	A, B B
	3.8 Mains Dips and Interruptions	prEN 50093:1991 EN 61000-4-11:1994 including Amendment 1:2001 IEC 61000-4-11:ed1:1994 EN 61000-4-11:2004 A1:2017 IEC 61000-4-11:ed 2:2004 A1:2017 EN 61000-4-29:2001	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd) 3.9 Electrostatic Discharge to 25 kV	EN 55101-2:1989 EN 60801-2:1993 EN 61000-4-2:1995 including Amendment 1:1998 and Amendment 2:2001 EN 61000-4-2:2009 IEC 61000-4-2 ed 1.2:2001 IEC 61000-4-2 ed2: 2008 ISO 10605:2008 Am1:2014	A, B
	3.10 Generic and Product Specific Standards These standards, which refer to basic standards, are included in this Schedule, but only to the extent that the referenced standards are explicitly included in Sections 3.1 to 3.9 of the Schedule.	EN 12182:1999 (Clause 7) prEN 12184:1996 prEN 12830:1997 EN 12895:2000 EN 50081-1:1992 EN 50081-2:1994 EN 50082-1:1992 EN 50082-1: 1997 EN 50082-2:1995 EN 61000-6-1:2001 EN 61000-6-1:2007 IEC 61000-6-1 ed2:2005 EN 61000-6-2:2001 EN 61000-6-2:2005 IEC 61000-6-2:ed1:1999 IEC 61000-6-2 ed2:2005 AS/NZS 61000.6.2:2006 IEC 61000-6-3 ed1:1996 EN 61000-6-3:2001 plus Amendment A11:2004 EN 61000-6-3:2007 Limited to 16A for harmonics and flicker EN 61000-6-3:2007 + A1 2011 Limited to 16A for harmonics and flicker AS/NZS 61000-6-3:2007 EN 61000-6-4:2001 EN 61000-6-4:2007	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.10 Generic and Product Specific Standards (cont'd)	EN 61000-6-4:2007 + A1 2011 AS/NZS 61000.6.4:2012 IEC 61000-6-4 ed1:1997 Excluding Table A1 IEC 61000-6-4 ed2:2006 prEN 50082-2:1996 EN 50083-2:1995 including Amendment A1:1997 (Test 4.4.2 only) EN 50093 (draft):1991 EN 50121-1:2000 EN 50121-1:2006 EN 50121-1:2015 EN 50121-2:1996 EN 50121-3-1:1996 EN 50121-3-1:2000 EN 50121-3-1:2006 EN 50121-3-1:2015 EN 50121-3-1:2017 EN 50121-3-2:1996 prEN 50121-3-2:1997 EN 50121-3-2:2000 EN 50121-3-2:2006 EN 50121-3-2:2015, excluding Table 1 row 1.2 EN 50121-3-2:2016, excluding Table 1 row 1.2 EN 50121-4:1996 EN 50121-4:2000 (excluding Table A - Short Circuit Current Tests) EN 50121-4:2006 EN 50121-4:2015 EN 50121-4:2016 EN 50121-5:1996 EN 50121-5:2000 EN 50121-5:2006 EN 50121-5:2015, excluding Table 3 row 3.2 prEN 50127-1:1993 EN 50130-4:1995 including Amendment 1:1998 and Amendment 2:2003 EN 50130-4:2011 EN 50130-4:2011+A1:2014	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.10 Generic and Product Specific Standards (cont'd)	EN 50199:1995 EN 50270:2006 EN 50293:1999 EN 50293:2000 EN 12966: 2014 Section 4.5.4 EN 50293: 2012 EN 55014-2:1997 EN 55014-2:1997 including Amendment 1:2001 and Amendment 2:2008 EN 55014-2:2015 EN 55014-1:2006 + A2:2011 excluding use of EN 55015, EN 61000-4-20 method and Table B.3 EN 55024:1998 including Amendment A1:2001 and Amendment A2:2003 EN 55024:2010 including Amendment A1:2015 CISPR 24:1997 including Amendment A1:2001 and Amendment A2:2002 EN 55032: 2012 AC:2013 CISPR 32: 2012 EN 55032: 2015 CISPR 32: 2015 EN 55035: 2017 EN 55103-1:1996 EN 55103-1:2009 EN 55103-1:2009 + A1:2012 EN 55103-2:1996 EN 55103-2:2009 EN 55104:1995 EN 50155:2001, Clauses 3.1.1.1, 3.1.1.2, 10.2.6.2 and 10.2.6.3 EN 50155:2007, Clauses 5.1.1.1, 5.1.1.2, 12.2.6, 12.2.7 and 12.2.8 EN 55015:2006 including Amendment A2:2009 Limited to LED products IEC 60601-1-2:ed1:1993	A,B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd) 3.10 Generic and Product Specific Standards (cont'd)	IEC 60601-1-2:ed2:2001, including Amendment 1:2004 Section 5, Clause 36 only IEC 60601-1-2:ed 2.1:2005 Section 5, Clause 36 only IEC 60601-1-2:ed 3:2007 IEC 60601-1-2:ed 4:2014 EN 60601-1-2:1993 EN 60601-1-2:2001, Section 5, Clause 36 only EN 60601-1-2:2007 inc Corrigendum 2010 EN 60601-1-2:2015 EN 61204-3:2000 EN 61036:1996 EN 61326-1: 2013 Excluding Harmonics & Flicker above 16 Amps EN 61326:1997 including Amendment 1:1998, Amendment 2:2001 and Amendment 3:2003 EN 61326-1:2006 IEC 61326:ed 2:2002 IEC 61326-1:ed 1:2005 Clauses 4.4.2, 4.4.3, 4.4.4, 4.4.7 and 4.4.8 IEC 61326-2-6:2005 EN 61326-2-6:2006 EN 61326-2-6:2013 EN 61800-3:1996 including Amendment A11:2000 Clauses 5.3.1, 5.3.2, 6.1.2, 6.1.3, 6.3.1 and 6.3.2 only EN 61800-3:2004 + A1:2012. Clauses; 5.2.3 (Tables 5&7- voltage dips & interruptions rows only), 5.3.2, 5.3.3, 6.2.3, 6.2.4, 6.4.1.1,6.4.1.2, 6.4.1.3, 6.4.1.4, 6.4.2.2, 6.4.2.3, 6.4.2.4, 6.5.2, 6.5.2.3.1 & 6.5.2.3.2 Only EN IEC 61800-3: 2018 IEC 62238: 2003	A,B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.10 Generic and Product Specific Standards (cont'd)	CEGB DN5:1982 CEGB EES:1989 TRG 1068:1991 RC5000:Issue P:1990, Section 12 AS/NZS 4252.1:1994 EN 300 386:V1.3.2:2003 EN 300 386:V1.3.3:2005 EN 300 386:V1.4.1:2008 EN 300 386:V1.5.1:2010 Excluding Harmonics & Flicker measurements above 16 Amps EN 301 489-1:V1.8.1:2008 EN 301 489-1:V1.9.2:2011 Draft EN 301 489-1:V2.1.0:2016 Final Draft EN 301 489-1:V2.1.1:2016 EN 301 489-1:V2.1.1:2017 Draft EN 301 489-1:V2.2.0:2017 Draft EN 301 489-1:V2.2.1:2019 EN 301 489-3:V1.2.1:2000 EN 301 489-3:V1.4.1:2002 EN 301 489-3:V1.6.1-2013 Draft EN 301 489-3:V2.1.0:2016 Final Draft EN 301 489-3:V2.1.1:2017 EN 301 489-4:V1.2.1:2000 EN 301 489-4:V1.4.1:2009 EN 301 489-5:V1.2.1:2000 EN 301 489-5:V1.3.1:2002 EN 301 489-7:V1.1.1:2000 EN 301 489-7:V1.2.1:2002 EN 301 489-7:V1.3.1:2005 EN 301 489-8:V1.1.1:2000 EN 301 489-8:V1.2.1:2002 EN 301 489-9:V1.1.1:2000 EN 301 489-9:V1.3.1:2002 EN 301 489-9:V1.4.1:2007 Final Draft EN 301 489-9:V2.1.1:2017 EN 301 489-10:V1.1.1:2000 EN 301 489-12:V2.2.2:2008 EN 301 489-13:V1.2.1:2002	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.10 Generic and Product Specific Standards (cont'd)	EN 301 489-17:V1.1.1:2000 EN 301 489-17:V1.2.1:2002 EN 301 489-17:V1.3.2:2008 EN 301 489-17:V2.1.1:2009 EN 301 489-17:V2.2.1:2012 Draft EN 301 489-17:V3.1.0:2016 Final Draft EN 301 489-17:V3.1.1:2016 EN 301 489-17:V3.1.1:2017 Draft EN 301 489-17:V3.2.0:2017 EN 301 489-18:V1.3.1:2002 EN 301 489-19:V1.2.1:2002 Draft EN 301 489-19:V2.1.0:2017 EN 301 489-20:V1.2.1:2002 Draft EN 301 489-20:V2.1.0:2017 EN 301 489-22:V1.1.1:2000 EN 301 489-22:V1.3.1:2003 EN 301 489-23:V1.1.1:2001 EN 301 489-23:V1.2.1:2002 EN 301 489-23:V1.3.1:2007 EN 301 489-23:V1.5.1:2011 EN 301 489-24:V1.2.1:2002 EN 301 489-24:V1.3.1:2005 EN 301 489-24:V1.4.1:2007 EN301 489-24:V1.5.1:2010 Draft EN 301 489-52:V1.1.0:2016 EN 300 386 v1.6.1.2012 Excluding Harmonics & Flicker measurements above 16 Amps EN 301 489-28:V1.1.1:2004 EN 301 489-50:V1.2.1:2013 Draft EN 301 489-50:V2.1.0:2016 Draft EN 301 489-50:V2.2.0:2017 EN 301 843-1:V1.1.1:2001 EN 301 843-1:V1.2.1:2004	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
	3.10 Generic and Product Specific Standards (cont'd)	EN 301 843-1:V1.3.1:2012 EN 301 843-1:V2.2.1:2017 Automotive Conformance Specification 5, issue 9:2004 ISO 7176-21:2003 Lloyd's Register LR1:2002 DNV No 2.4 2006 Sections 3.14 & 3.15 DNVGL-CG-0339: 2016 Section 3 Clauses 4, 5 , 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 14.10, 14.11, 14.12 and 15.1 EN 12015:2004 excluding Clause 6.5 and Table 4 EN 12015:2014 excluding tables 3, 4 and 5 EN 12016:2004 including Amendment A1:2008 excluding Tables 5 and 7 EN 12016:2013 excluding Tables 5 and 7 IEC 60533 ed 2:1999 IEC 60533: 2015 EN ISO 15197:2003 Section 6.4 and Annex A only 3GPP TS 37.113:V11.1.0:2012 3GPP TS 25.113: V11.1.0:2015 Home Office RF susceptibility test requirement, CAST Publication number: 010/18	A, B A, B B A, B B A, B
Radio Transmitters and Receivers	3.11 EMC Tests	ETS 300 132-2:1996 EN 301 843-1:V1.2.1:2004 EN 301 843-1:V1.3.1:2012 EN 301 843-1:V2.2.1:2017 EN 301 843-2:V1.2.1:2004 TS 125 113:V6.1.0:2004 TS 125 113:V6.2.0:2005 TS 125 113:V7.2.0:2005 TS 125 113:V8.3.0:2008	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25, 26 and 27	**3 CIVIL EMC TESTS** (cont'd)		
Marine Navigational Equipment	3.12 EMC Tests	IEC 60945:1994 EN 60945:1997 IEC/EN 60945:2002 including Corrigendum 1: 2008 ISO 694:2000, Annex A EN 301 843-1:V1.3.1:2012 EN 301 843-1:V2.2.1:2017	A, B
	4 TRANSIENT TESTING		
	4.1 NEMP Pulse Transients	BRB/RIA Specification No 12:1984	A
	4.2 Damped Sinusoid	BS 6491:Part 1:1984 IEC 255-4:1970	
	4.3 Damped Cosine	CCITT K17:1988 CCITT K20:1991	
	4.4 Lightning Longwave Pulse	CCITT K21:1988 DEF STAN 59-41, Part 3, Issue 3, Amendment 4, July 1991, except DRE03	
	4.5 Lightning shortwave Pulse		
	4.6 Lightning Oscillatory Waveform	MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115 RTCA DO-160C	
	4.7 Lightning Multiple Stroke	Boeing D6-16050-4 Rev F	
	4.8 Lightning Multiple Burst	SAE-AE4L 87-3:1987 MIL STD 826A:1968	A
	4.9 Pulse Excitation	BS 3G 100-3:1979 Boeing D2 00Z001, Except paragraphs 12.7.5.3.2 and 12.7.5.4.2 SPE-J-000-E-1-1000 LEMP-EFA-2 (Fast Pulse)	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	5 RADIO TESTING		
	Frequency Range: 10 Hz to 40 GHz Temperature: -25°C to +55°C Relative Humidity: 20% to 75%	EN 300 066:V.1.3.1:2001 EN 300 219-1:V1.2.1:2001 EN 300 219-2:V1.1.1:2001 EN 300 440-1:V1.3.1:2001 EN 300 440-1:V1.4.1:2008 excluding products with carrier frequencies ≥ 20GHz and Clause 9 and Annex E EN 300 440-1:V1.5.1:2009 excluding products with carrier frequencies ≥ 20GHz and Clause 9 and Annex E EN 300 440-1:V1.6.1:2010 excluding products with carrier frequencies ≥ 20GHz and Clause 9 and Annex E Draft EN 300 440: v2.1.0:2016 Final Draft EN 300 440:V2.1.1:2017 excluding products with carrier frequencies ≥ 20GHz & Annex F Draft EN 300 440:V2.2.0:2017 <20 GHz fundamental frequency EN 300 440:V2.2.1:2018 <20 GHz fundamental frequency	A
Base-Stations and Mobiles Cell Extenders Cellular Infrastructure Radio Equipment Cellular Telephones Communication and Control Systems Cordless Telephones Digital and Analogue CB Radio Digital Short Range Radio Emergency Positioning Indicator Radio Beacon (EPIRB) ERMES Pager Systems Frequency Hopping Radio LAN Equipments GSM Base-Station Equipment Low Power Devices (Transmitters) Low Power Induction Marine Digital Selective Calling Modems and Radios Maritime Radio Equipment On-Frequency Repeaters Pagers Paging Systems Personnel Locator Beacons Pocket Radio Equipment Private Mobile Radio Radio Security Equipment, Onsite and Wide Area	5.1 Emission– - Effective Radiated Power: 9 kHz to 40 GHz 5.2 Emissions Conducted: 100 Hz to 18 GHz 5.3 Maximum Frequency Deviation: 10 Hz to 100 kHz 5.4 Transmitter Carrier Power: 10 □W to 4 kW 5.5 Intermodulation Attenuation: 100 kHz to 4 GHz 5.6 Tone Squelch Threshold 5.7 Code Frequency Selectivity 5.8 Decoder Response Time 5.9 Selective Signal Threshold 5.10 Selective Signalling Code Selectivity 5.11 Encoder Frequency	EN 300 440-2:V1.1.1:2001 EN 300 440-2:V1.1.2:2004 EN 300 440-2:V1.2.1:2008 EN 300 440-2:V1.3.1:2009 EN 300 440-2:V1.4.1:2010 EN 300 086-1:V1.2.1:2001 EN 300 086-1:V1.4.1: 2010 EN 300 086-2:V1.1.1:2001 EN 300 113-1:V1.5.1:2003 EN 300 113-1:V1.6.1:2007 EN 300 113-1:V1.6.2:2009 EN 300 113-1:V1.7.1:2011 EN 300 113-2:V1.3.1:2003 EN 300 113-2:V1.4.1:2007 EN 300 113-2:V1.4.2:2009 EN 300 113-2:V1.5.1:2011 EN 300 113 V2.2.1:2016	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		
Search and Rescue Radar Transponders	5.12 Encoder Modulation	EN 300 135-1:V1.2.1:2008 EN 300 152-1:V1.2.2:2000	
Spread Spectrum Radio LAN Equipments	5.13 Encoder Data Rate	EN 300 152-2:V1.1.1:2000 EN 300 152-3:V1.1.1:2001	A
Spread Spectrum Radio LAN Equipments (cont'd)	5.13 Encoder Data Rate (cont'd)	EN 302 152-1:V1.1.1:2003 EN 300 220-1:V2.1.1:2006 EN 300 220-1:V2.3.1:2010	A
	5.15 Effective Receiver	EN 300 220-1:V2.4.1:2012 Draft EN 300 220-1 V3.1.0:2016 EN 300 220-1:V3.1.1:2017	A
	Sensitivity: 1 GHz to 40 GHz	EN 300 220-2:V2.1.1:2006 EN 300 220-2:V2.1.2:2007 EN 300 220-2:V2.3.1:2010 EN 300 220-2:V2.4.1:2012 Draft EN 300 220-2 V3.1.0:2016 EN 300 220-2:V3.1.1:2017	
	5.16 Transmitter Transients: 26 MHz to 1.3 GHz	EN 300 296-1:v1.3.1:2010 EN 300 296-1 V1.4.1 2013 EN 300 225 V1.4.1:2004	
	5.17 Blocking and Desensitisation: 100 kHz to 4 GHz	EN 300 225 V1.5.1:2015 EN 300 296-2:V1.3.1:2010 EN 300 296-2 V1.4.1 2013	
	5.18 Frequency Error: 10 MHz to 40 GHz	EN 300 328: V1.7.1:2006 EN 300 328: V1.8.1:2012 EN 300 328: V1.9.1:2015 Draft EN 300 328:v2.0.20:2016 EN 300 328:v2.1.1:2016 Draft EN 300 328:V2.2.0:2017	
	5.19 Permitted Range of Operation Frequencies: 10 Hz to 40 GHz	EN 300 330-1:V1.3.2:2002 EN 300 330-1:V1.7.1:2010 EN 300 330-1 v1.8.1:2015 EN 301 473:V1.3.1:2004	
	5.20 Adjacent Channel Power: to 90 dBc	EN 300 330-2:V1.3.1:2006 EN 300 330-2:V1.5.1:2010 EN 300 330-2 v1.6.1:2015 Final draft EN 300 330:V2.1.1:2016 EN 300 330:V2.1.1:2017 EN 300 338-1:V1.4.1:2017, excluding sound pressure level testing EN 300 338-1:V1.4.2:2017 EN 300 338-2:V1.4.1:2017, excluding sound pressure level testing	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		
	5.20 Adjacent Channel Power: to 90 dBc	EN 300 338-3:V1.2.1:2017, excluding sound pressure level testing EN 300 338-5:V1.2.1:2017, excluding sound pressure level testing	
	5.21 Out of Band Power: 10 Hz to 40 GHz	EN 300 386:V1.3.1:2001 EN 300 390-1:2000 EN 300 390-2:2000	A
	5.22 Adjacent Channel Selectivity: 100 kHz to 1 GHz	EN 300 394-1:V1.3.1:2007 Clauses 8.6 and 9.9 only	
	5.23 Maximum Usable Sensitivity: 9 kHz to 1 GHz	EN 300 422-1:V1.3.2:2008 EN 300 422-2:V1.2.2:2008 EN 300 609-4:2000 excluding Clauses 8 and 9	
	5.24 Reference Sensitivity: 100 kHz to 1 GHz	EN 300 433-1:v1.1.3:2000 EN 300 433-1:V1.3.1:2011 EN 302 064-1:V1.1.2:2004	
	5.25 Intermodulation Response: (2 and 3 Generator Method): 100 kHz to 1 GHz	EN 302 064-2:V1.1.1:2004 EN 300 676-1: V1.4.1:2007 Excluding clauses 7.4.5, 8.14 and 8.16 EN 300 676-1: V1.5.2:2011 Excluding clauses 7.4.5, 8.14 and 8.16	
	5.26 Mis-Operation (Adverse Power Supply): 100 kHz to 4 GHz	EN 300 676-2 V1.5.1 (2011-09) EN 300 676-2:V2.1.1:2015	
	5.27 Spurious Response Rejection: 10 Hz to 4 GHz	EN 301 025-1:V1.3.1:2007 EN 301 025-2:V1.3.1:2007	
	5.28 Encoder Response	EN 301 025-3:V1.3.1:2007 EN 301 025-1:V1.4.1:2010	
	5.29 Amplitude Characteristics of Receiver: 100 kHz to 1 GHz	EN 301 025-1 V1.5.2 2013 EN 301 025-2:V1.4.1:2010	
	5.30 Co-Channel Rejection: 100 kHz to 1 GHz	EN 301 025-2 V1.5.1 2013 EN 301 025-3:V1.4.1:2010 EN 301 025-3 V1.5.1 2013 EN 301 025:V2.2.1:2017 EN 301 178-1: V1.2.1:2003 EN 301 178-1:V1.3.1:2007 EN 301 178:V2.2.2:2017 EN 300 720-1:V1.3.2:2007 EN 300 720-2:V1.2.1:2007 EN 300 720:V2.1.1:2017	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		
	5.31 AF Response of Modulation Frequencies: > 2.55 kHz 5.32 Modulation Distortion: 20 MHz to 950 MHz 5.33 Transmitter Noise and Hum: 20 MHz to 950 MHz 5.34 Harmonic Content and Output Power: 10 Hz to 100 kHz 5.35 Modulation 5.36 Squelch Facility: 100 kHz to 1 GHz 5.37 Accuracy and Stability of Timing Parameters 5.38 Bit Error Rate Measurements 5.39 Coding, Protocol, RF, Modulation 5.40 Multiple Watch Characteristic, Peak Power Density 5.41 Verification of Correct Decoding 5.42 Transient Frequency Behaviour	EN 301 178-2:V1.2.2:2007 EN 301 357-1: V1.3.1:2006 EN 301 357-1: V1.4.1:2008 Draft EN 301 357:V2.0.1:2017 EN 301 357:V2.1.1:2017 EN 301 357-2:V1.3.1:2006 EN 301 357-2:V1.4.1:2008 EN 301 681:V1.3.2:2003 EN 301 681 V1.4.1 (2011-11) EN 301 681:V2.1.2:2016 EN 301 441: V1.1.1:2000 EN 301 441:V2.1.1:2016 EN 301 721:V1.2.1:2001 EN 301 925 V1.4.1:2013 EN 300 698-1:V1.3.1:2003 EN 300 698-1:V1.4.1:2009 EN 300 698-2:V1.1.1:2000 EN 300 698-3:V1.1.1:2001 EN 301 033:V1.2.1:2005 Excluding clauses 8.10 EN 301 893:V1.2.3:2003 EN 301 893:V1.5.1:2008 EN 301 893:V1.6.1::2011 EN 301 893:V1.7.1:2012 EN 301 893:V1.8.1:2015 Draft EN 301 893:V2.0.7:2016 Draft EN 301 893:V1.8.5:2017 EN 301 893:V2.1.1:2017 Draft EN 301 893:V2.1.3:2017 EN 301 908-1:V2.2.1:2003 EN 301 908-1:V3.2.1:2007 EN 301 908-1:V4.2.1:2010 EN 301 908-1:V5.2.1:2011 EN 301 908-1 V6.2.1:2013 EN 301 908-1:V7.1.1:2015 Draft EN 301 908-1: v11.0.1:2016 EN 301 908-1:V11.1.1:2016 EN 302 544-1:V1.1.0 Draft:2008 EN 302 208-1:V1.1.1:2004 EN 302 208-1:V1.2.1:2008	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		A
	5.43 Residual Modulation	EN 302 208-1: V1.4.1: 2011 EN 302 208-1:V2.1.1:2015	
	5.44 Data Message Bit Rate	excluding Clause 8.7 EN 302 502:V1.2.1:2008 EN 302 502:V2.1.1:2017 EN 302 617-1:V1.1.1:2009 EN 302 617-1:V2.3.1:2018 EN 302 617-2:V2.1.1:2015 EN 302 208-2: V1.4.1: 2011 EN 302 208-2:V2.1.1:2015	
	5.45 Message Data Content	Excluding Clause 4.2.8 EN 302 194-1:V1.1.2:2006	
	5.46 Frequency Stability	Clauses 7.9.2, 7.9.3 and 7.9.5 only	
	5.47 Power Rise and/or Fall Time	EN 302 885-1 V1.3.0 (2013-05) Draft. Clauses 8.12, 8.13 & 8.14 only EN 302 885-1:V1.3.1:2014	
	5.48 Power Burst Rate	EN 302 885-2 V1.2.0 (2013-05) Draft. Clauses 5.3.9, 5.3.10 & 5.3.11 only EN 302 885-2 V1.2.2 (2014-03)	
	5.49 Power Burst Width	EN 302 885-3 V1.2.2 (2014-03) EN 302 961-1 V1.2.1 (2013-07)	
	5.50 Magnitude of Phase	EN 302 961-2 V1.2.1 (2013-07) ETS 300 487:1996 including Amendment 1:1997	
	5.51 Rise and/or Fall Time of Pulse Modulation	COSPAS/SARSAT T.007 Issue 4:Nov 2005 including Revision 1: Oct 2006, Revision 2: Nov 2007 Revision 3: Oct 2008 excluding A3.8.7 Revision 4: Oct 2009 Revision 5: Oct 2010 Revision 6: Oct 2011 Revision 7: Oct 2012 Revision 8 Oct 2013 Revision 9 Oct 2014 Revision 10 Dec 2015 Revision 11 Dec 2016	
	5.52 Radiated Spurious Emissions		

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd) 5.52 Radiated Spurious Emissions	COSPAS/SARSAT T.007 Issue 5:May 2017 including Revision 1: Feb 2018, Revision 2: Jun 2018, Revision 3: Feb 2019, excluding RLS and ELT (DT) testing NSS PLB06 clauses 4.1, 4.2, 4.3, 4.5 and 4.6 AS/NZS 4268:2003 including Amendment 1:2005 excluding 5GHz WLAN and Data Communication Transmitters AS/NZS 4268:2008 including Amendment 1:2010 AS/NZS 4268:2012 including Amendment 1, excluding carrier frequencies >40 GHz and excluding conducted & radiated emissions for carrier frequencies between 20 GHz and 40 GHz AS/NZS 4268:2017, limited to measurements <40 GHz AS/NZS 4771:2000 excluding Clauses 5.1.2 and 7.2.9 AS/NZS 4771:2000 including Amendment 1 excluding Clauses 5.1.2 and 7.2.9 RTCM Paper 35-94/ SC113-53:May 1994 FCC CFR 47: Part 2: 2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47: Part 24:2017, excluding devices with transmit frequencies >10 GHz CFR 47 FCC Part 74: 2014 FCC CFR47 Part 15:2018 Excluding subparts F, G & H, excluding devices with transmit frequencies >10 GHz ANSI C63.10-2009	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		
	5.52 Radiated Spurious Emissions	ANSI C63.10-2013 ANSI C63.17-2013 ANSI C63.26:2015, excluding radiated emissions >40 GHz RSS-170 issue 3 2015 ANSI TIA-603-C excluding clauses 2.1.20 & 2.2.10 ANSI TIA-603-D ANSI TIA-603-E FCC CFR 47:Part 25:2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47 Part 73: 2014 FCC CFR 47 Part 80: 2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47:Part 90: 2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47 Part 95:2017 FCC CFR 47 Part 97:2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47:Part 22:2018, excluding devices with transmit frequencies >10 GHz FCC CFR 47 Part 27:2018 excluding devices with transmit frequencies >10 GHz FCC CFR 47 Part 87:2016 FCC CFR 47 Part 96:2018 FCC CFR 47 Part 101: 2014 RSS-111:Issue 5:2014 RSS-112:Issue 1:2008 RSS-117:Issue 3:2016 RSS-119:Issue 12:2015 RSS-123:Issue 3:2015 RSS-125:Issue 2, Rev.1:2000 RSS-127:Issue 1:2009 RSS-130:Issue 1:2013 RSS-131:Issue 2:2003 RSS-132:Issue 3:2013 RSS-133:Issue 6:2018 (Amendment)	A A A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd) 5.52 Radiated Spurious Emissions	RSS-135:Issue 2:2009 RSS-137:Issue 2:2009 RSS-139 Issue 3:2015 RSS-141:Issue 2: 2010 RSS-142:Issue 5:2013 RSS-181:Issue 1:1971 RSS-182:Issue 5: 2012 RSS-191:Issue 3:2008 Conducted and Radiated Emissions < 60G Hz RSS-192:Issue 3:2008 RSS-194:Issue 1:2007 RSS-195 Issue 2: 2014 RSS-196 Issue 1: 2010 RSS-197:Issue 1:2010 RSS-199:Issue 3:2016 RSS-210: Issue 9:2016 + A2:2017 RSS-211:Issue 1:2015 RSS-213:Issue 3:2015 RSS-215:Issue 2:2009 RSS-220:Issue 1:2009 RSS-222:Issue 1:2015 RSS-236:Issue 1:2012 RSS-238:Issue 1:2013 RSS-243:Issue 3:2010 RSS-244:Issue 1:2013 RSS-247:Issue 2:2017 RSS-251:Issue 1:2014 RSS-287:Issue 2:2014 RSS-288:Issue 1:2012 RSS-310:Issue 4:2015 AS/NZS 4415.1:2003 excluding Clauses 5.5.14 and 5.7 AS/NZS 4415.1:2003 including Amendment 1:2004 excluding clause 5.5.14 AS/NZS 4415.2:2003 Including Amendment 1; excluding clauses 5.1, 5.3 and 5.5	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd) 5.52 Radiated Spurious Emissions	AS/NZS 4583:2010 ARIB STD-T66 V2.1:Mar 2003 ARIB STD-T66 V3.5: Apr 2008 ARIB STD-T66 V3.6: Dec 2012 ARIB STD-T66 V3.7: Oct 2014 ARIB T-82 Version 1.1 ARIB T-93 V1.1: Sep 2007 ARIB RCR STD-T33 V3.0: June 1997 RSS-GEN Issue 5: 2018, Amd 1: 2019 Limited to upper measurement frequency of 40 GHz EN 302 291-1:V1.1.1:2005 Excluding section 8.2 EN 302 291-2:V1.1.1:2005 IEC 1097-12:1996 IEC 62238, Ed 1:2003 IEC 61097-2:2002, Clause 5.15, Annex B & D IEC 61097-2:2008 Clause 5, Annex B&D IEC 61097-6:2005 + A1:2011 IEC 61108-1:2003 Clause 5.6 excluding clauses 5.6.4.1.2, 5.6.4.3.2, 5.6.11, 5.6.9 and 5.6.12 RTCM Paper 76-2002/ SC110-STD, clauses A.8.0, A.9.0 and A.12.0 RTCM Paper 77-2002/ SC110-STD, clauses A.10.0, A.12.0 and A.17.0 RTCM Standard 11000.3: 2012 RTCM Paper 114-2008/ SC110-STD, clauses A.1.11, A.1.12, A.12, A.13, A.14 and A.16 RTCM 11901.1:2012, including Amdt 1:2014 & Amdt 2:2015 RTCM 11010.2 (RTCM Paper 189-2010/SC110-STD clauses A12, A14, A16 & A20	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd)		A
	5.52 Radiated Spurious Emissions	RTCM 11010.2 June 2012 RTCM 11010.2 June 2014 RTCM 11010.2 July 2016 AS/NZS 4280.1:2003 including Amendments 1, 2, 3 and 4 Clause 5.15, Annex B and D AS/NZS 4280.1:2017 including Amendment 1 Clause 5, Annex B and D AS/NZS 4280.2:2003; Section 3 and Appendix E AS/NZS 4280.2:2017 EN 302 326-2:V1.2.1:2007 ICES-003, Issue 6: 2016 EN 61993-2:2002 IEC 61993-2:2001 IEC 61993-2:2012 EN 303 135:V1.1.1:2014 EN 303 135:V2.1.1:2016 Draft ETSI EN 303 098-1 V1.1.0: 2013 Final Draft ETSI EN 303 098-1 V1.2.1 (2014-06) ETSI EN 303 098-1 V1.2.1 (2014-09) EN 303 098-1:V2.1.1:2016 Draft ETSI EN 303 098-2 V1.1.0: 2013 Draft ETSI EN 303 098-2 V1.1.1 (2014-02) Final Draft ETSI EN 303 098-2 V1.2.1 (2014-09) ETSI EN 303 098-2 V1.2.1 (2014-11) 3GPP TS 51.010-1, clause 12.2.1 and 12.2.2 only EN 301 511:V7.0.1:2000 EN 301 511:V9.0.2:2003 EN 301 511:V12.1.10:2016 Clauses 4.2.16 & 4.2.17 EN 301 511:V12.5.1:2017 Clauses 4.2.16 & 4.2.17 NAPRD 03	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on page 43	**5 RADIO TESTING** (cont'd) 5.52 Radiated Spurious Emissions	3GPP TS 34.124 v9.2.0:2010 Clause 8.2 only 3GPP TS 34.124 v11.0.0 (2012-03) Clause 8.2 only 3GPP TS 34.124 V12.0.0 2014 3GPP TS 36.124 V12.1.0 2014 Clause 8.2 only Draft EN 303 345:V1.1.1:2016 Draft EN 303 345:V1.1.0:2017 Final Draft ETSI EN 303 345: V1.1.7:2017 Excluding AM devices in the LF, MH and HF bands and DRM. EN 303 372-2:V1.1.1:2016 EN 303 413:V0.2.0:2016 Draft EN 303 413:V1.1.0:2017 EN 303 413:V1.1.1:2017 EN 303 417:V1.1.1:2017	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	6 SAR TESTS		
Any electromagnetic field (EM) transmitting devices intended to be used with the radiating part of the equipment in close proximity to the human ear and body including mobile phones, cordless phones, etc, for the following Frequencies	6.1 Specific Absorption Rate 450 MHz, 750 MHz, 835 MHz 850 MHz, 900 MHz, 1640 MHz 1800 MHz, 1900 MHz 2100 MHz, 2300 MHz 2450 MHz, 2600 MHz, 5200 MHz 5500 MHz, 5800 MHz	EN 50360:2001 EN 50360:2001 + A1:2012 EN 50360:2017 Radiocommunications (Electromagnetic Radiation Human Exposure) Standard (ACA 2003), Sections 10 and 11 EN 50566:2013 EN 50566:2017 EN 62209-1:2006 EN 62209-1:2016 IEC 62209-2:ed 1.0:2010 plus Corrigendum 1 EN 62209-2:2010 RSS-102 Issue 5:2015 IEEE 1528:2013	A
	6.2 Nerve Stimulation 10Hz to 400kHz	SPR-002 Issue 1:2016	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	7 SAFETY TESTS		
Information Technology Equipment	7.1 Safety Tests Equipment with a rated voltage not exceeding: 600 V	IEC 60950-1:2001 + A1:2009 +A2:2013 EN 60950-1:2006 + A11:2009 +A1:2010 + A12:2011 + A2:2013 AS/NZS 60950.1:2015 Excluding: 4.2.8, 4.3.12, 4.3.13, Annex U, Annex Y, Annex CC, Annex ZB 4.3.6, Annex ZX EN 62368-1:2014 (excluding clauses 4.7, 5.4.1.10.2, 5.4.2.3.2.5, 5.4.3.3, G.13.6.2, G.7.1, Annex U, 4.3.12, 10, Annex S.3, 5.4.4.6.5, Annex G.9, Annex G.5.2, Annex J) AS/NZS 62368-1:2018 (excluding clauses 4.7, 5.4.1.10.2, 5.4.2.3.2.5, 5.4.3.3, G.13.6.2, G.7.1, Annex U, 4.3.12, 10, Annex S.3, 5.4.4.6.5, Annex G.9, Annex G.5.2, Annex J)	A, B, E
Domestic Electronic Equipment	7.2 Safety Tests Equipment with a rated voltage not exceeding: 433V rms between phases 250V rms phase to neutral	IEC 60065:2001 (Edition 7) IEC 60065:2005 (Edition 7.1) EN 60065:2002 EN 60065:2002 including Amendment 1:2006 & Amendment 11:2008 Excluding clauses 6, 7.2, 8.18, 12.3, 13.4, 13.6, 13.7, 14.1, 14.2, 14.6 (part), 16.3(b), 18 and Annex H IEC 60065:2010 (Edition 7.2) EN 60065:2002 inc. Am1:2006, Am11:2008, Am2:2010 & Am12:2011 IEC 60065:2014 (Edition 8) EN 60065:2014 (Edition 8) excluding clauses: 6, 12.3, 14.2, 14.6 (part), 16.3(b), 18, Z1 and Annex H	A, E A, B, E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	7 SAFETY TESTS (cont'd)		
Active Medical Equipment	7.3 Electrical, Mechanical, Flame	IEC60601-1:1998 + A1:1991 + A2:1995, excluding clauses 17h, 25,37 &59 IEC 60601-1:2005(Edition 3) IEC 60601-1:2005 + A1:2012 (Edition 3.1) EN60601-1:2006 EN 60601-1:2006 + A11:2011 +A1:2013 Excluding clauses 8.5.5.1, 8.5.5.2, 8.8.4.2, 8.9.1.7, 9.5.2, 9.6.2.1, 9.6.3, 9.7.5, 10.1 10.4, 11.2, 15.4.2, 15.4.3.4, Annex G	A, E
Laboratory/ Measurement Equipment	7.4 Electrical, Mechanical, Flame	IEC /EN 61010-1:2010, excluding clauses 6.7.1.3, 10.5.3 b) 2), 11.7, 12.2.1, 12.3, 12.5.1, 12.5.2, 12.6 & 13.2.3 IEC /EN 61010-1:2010, excluding clauses 10.5.3 b) 2), 11.7, 12.2.1, 12.3, 12.5.1, 12.5.2, 12.6 & 13.2.3	A, E B
Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability	7.5 Safety usability	IEC 60601-1-6:2010 +A1:2013 EN 60601-1-6:2010 +A1:2015	A
Medical devices -- Part 1: Application of usability engineering to medical devices	7.6 Safety usability	IEC 62366:2007+A1:2014 EN 62366:2008 +A1:2015 IEC/EN 62366-1:2015	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	7 SAFETY TESTS (cont'd)		
Medical electrical equipment -- Part 1-11: General requirements for basic safety and essential performance -- Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment	7.7 Safety, essential performance	IEC60601-1-11:2010 +C1:2011 EN 60601-1-11:2010 IEC/EN 60601-1-11:2015	A
Medical device software – Software life cycle processes	7.8 Software processes	IEC/EN 62304:2006 +AMD1:2015	A
Household and similar electrical appliances General requirements	7.9 Electrical Safety	IEC 60335-1:2001+AMD1:2004 EN 60335-1:2002+A15:2011 IEC 60335-1:2010+AMD2:2016, COR1:2016 EN 60335-1:2012+A11:2014, excluding clauses 22.7, 22.32, 29.2, Annex F, Annex J & Annex R	A, B
Battery chargers		EN 60335-2-29:2004+A2:2010 IEC 60335-2-29:2016	
Instantaneous water heaters		IEC 60335-2-35:2012 EN 60335-2-35:2016	A, B
Pumps		EN 60335-2-41:2003+A2:2010 IEC 60335-2-41:2012	
Fans		EN 60335-2-80:2003+A2:2009 IEC 60335-2-80:2015	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	8 EMC TESTS		
Any location where the tests defined in Column 2 and to the specifications given in Column 3 can be carried out, but subject to the limitations given in *Note 1* on Page 56 Military Establishment Ships	8.1 Conducted Emissions DC to 400 MHz	BS2G100:Part 2:Section 2:1967 and Amendment 1 BS2G100:Part 2:Section 2:1972 except Compass: Safe Distance BS 1597:1985 EN 55011:1991 and 1998 including Amendment A1:1999	E
Manufacturing Sites Construction Sites Offices PRODUCTS TESTED Electrical/electronic products Electrical installations Enclosures for electrical Equipment		EN 55014-1:2006 + A2:2011 excluding use of EN 55015, EN 61000-4-20 method and Table B.3 EN 55022:1994 including Amendment 1:1995 Amendment 2:1997 EN 55022:1998* including Amendment 1:2000 Amendment 2:2003 and Corrigenda 1 and 2 * includes signal line where standard ISNs and CDNs can be used EN 55022: 2010 inc Corrigendum 2011 MP-5 1986 IEC 533:1991 Aeritalia D-PT070A020LR Issue B BAe-WAS-SP-TOR-EMC034: 1987 DEF STAN 59-41 (Part 3) Issue 1, Section 3:2003 Except Clause 9.10, 9.11, 9.13, 9.18 and 9.19 DEF STAN 59-41:Issue 4: Parts 3 and 4 DEF STAN 59-41:Issue 5: Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 3:A/L1:1981: Panavia SP-P-90003	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	8 EMC TESTS (cont'd)		
PRODUCTS TESTED	8.1 Conducted Emissions DC to 400 MHz (cont'd)		
Electrical/electronic products Electrical installations Enclosures for electrical Equipment		PTARMIGAN Manual of Standards:Section 11:Issue 5 RTCA DO160A, B, C, D, E, G TS 1527:Issue 2 MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115	
As listed on Pages 25,26 and 27	8.2 Radiated Emissions E Field: 20 Hz to 26 GHz	BS2G100:Part 2:Section 2: 1967 and Amendment 1 BS2G100:Part 2:Section 2: 1972 except Compass: Safe Distance BS 1597:1985 EN 55011:1991 and 1998 including Amendment A1:1999 EN 55014-1:2006 + A2:2011 excluding use of EN 55015, EN 61000-4-20 method and Table B.3 EN 55022:1994 including Amendment 1:1995, Amendment 2:1997 EN 55022: 1998* including Amendment 1:2000 Amendment 2:20003 and Corrigenda 1 and 2 *includes signal lines where standard ISNs and CDNs can be used EN 55022: 2010 inc Corrigendum 2011 MP-5 1986 BAe-WAS-SP-TOR-EMC034 1987 DEF STAN 59-41:Issue 4 Parts 3 and 4 DEF STAN 59-41:Issue 5 Part 3	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd)		
	8.2 Radiated Emissions E Field: 20 Hz to 26 GHz	DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 3:AL/1:1981 PTARMIGAN Manual of Standards, Section 11, Issue 5 RTCA DO160A, B, C, D, E, G TS 1527:Issue 2 MIL STD 461A, B. C, D, E, F, G, excluding RS 105, limitations to CS115 TUV Procedure EMC TPIS-004	E
	8.3 Radiated Emissions H Field: 20 Hz to 30 MHz	BAe-WAS-SP-TOR-EMC034 :1987 DEF STAN 59-41:Issue 4: Parts 3 and 4 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 3:A/L1:1981 MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115 RTCA DO160B, C, D, E, G TÜV Procedure EMC TPIS-004	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.4 Conducted Susceptibility Power Control and Signal Lines DC to 600 MHz Bulk Current Injection CW: 50 kHz to 400 MHz Pulsed: 500 kHz to 50 MHz	BS2G100:Part 2:Section 2:1967 and Amendment 1 BS2G100:Part 2:Section 2:1972 except Compass: Safe Distance ENV 50141:1993 EN 61000-4-6:1996 including Amendment 1 EN 61000-4-6:2007 including Corrigendum 1:2007 EN 61000-4-6:2014 IEC 533:1991 IEC 801-6:1990 (Draft) IEC 61000-4-6:1995 (Draft) BAe-WAS-SP-TOR-EMC034: 1987 IEC 61000-4-6:ed1:1996 IEC 61000-4-6:ed 2:2003 including Amendment 1:2004 and Amendment 2:2006 IEC 61000-4-6:ed2.1:2004 IEC 61000-4-6:ed2.2:2006 DEF STAN 59-41: (Part 3): Issue 1, Section 3:2003 DEF STAN 59-41:Issue 4 Parts 3 and 4 DEF STAN 59-41:Issue 5 Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 3: AL/1:1981 Panavia SP-P-90003 PTARMIGAN Manual of Standards, Section 11:Issue 5 RTCA DO160A, B, C, D, E, G TS 1527:Issue 2 MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115	E E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.5 Fast Transients/Bursts Surge	IEC 801-4:1988 EN 61000-4-4:1995 IEC 1000-4-4:1995 EN 61000-4-5:1995 including Amendment 1:2001 EN 61000-4-5:2014 EN 61000-4-4:2004 including Amendment A1:2010 EN 61000-4-4 2012 IEC 1000-4-5:1995 BAe-WAS-SP-TOR-EMC034 :1987 DEF STAN 59-41 (Part 3) Issue 1, Section:2003 DEF STAN 59-41:Issue 4 Parts 3 and 4 DEF STAN 59-41:Issue 5 Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 PTARMAGIN Manual of Standards, Section 11:Issue 5 TS 1527:Issue 2 MIL STD 461A, B, D, E, F, G, excluding RS 105, limitations to CS115	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.6 Radiated Immunity Electric Field (See Note 1)	BAe-WAS-SP-TOR-EMC034 1987 DEF STAN 59-41 (Part 3) Issue 1, Section 3:2003 DEF STAN 59-41:Issue 4: Parts 3 and 4 DEF STAN 59-41:Issue 5: Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 3:A/L1:1981 RTCA DO160A, B, C, D, E, G MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115 EN 61000-4-6:1996 including Amendment 1: 2001	E
	8.7 Radiated Immunity Magnetic Field	BAe-WAS-SP-TOR-EMC034: 1987 DEF STAN 59-41 (Part 3): Issue 1, Section 3:2003 DEF STAN 59-41:Issue 4 Parts 3 and 4 DEF STAN 59-41:Issue 5: Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 NWS 2:AL/1:1981 Panavia SP-P-90003 PTARMIGAN Manual of Standards: Section 11:Issue 5 RTCA DO 160A, B, C, D, E, G TS 1527:Issue 2 MIL STD 461A, B, C, D, E, F, G, excluding RS 105, limitations to CS115	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.8 ESD	EN 61000-4-2:1995 IEC 60801-2:1991 IEC 61000-4-2:1995 including Amendment 1:1998 and Amendment 2:2001 DEF STAN 59-41 (Part 3) Issue 1, Section 3:2003 DEF STAN 59-41:Issue 4: Parts 3 and 4 DEF STAN 59-41:Issue 5: Part 3 DEF STAN 59-411 Issue 2: 2014 (excluding Part 5) DG Ships 250B:1981 MIL STD 461A, B, C, D, E, F, G, exclusions to RS 105, limitations to CS115	E
	8.9 Voltage Dips, Interruptions and Variations	EN 61000-4-11:1994 plus Amendment 1:2001 IEC 61000-4-11:1994 EN 61000-4-29:2001	E
	8.10 Generic EMC Standards These generic and similar standards are included in this Schedule, but limited to those referenced basic standards that are listed in Sections 8.1 to 8.9 of the Schedule.	EN 61000-6-1:2001 EN 61000-6-2:2001 EN 61000-6-2:2005 AS/NZS 61000.6.2:2006 IEC 61000-6-2:ed1:1999 IEC 61000-6-2:ed2:2005 EN 61000-6-3:2001 EN 61000-6-4:2001 EN 61000-6-4:2007 + A1 2011 AS/NZS 61000.6.4:2012 prEN 50093 (Draft) EN 50121-1:2000 ENV 50121-2:1996 EN 50121-2:2000 EN50121-3-1:1996 EN 50121-3-1:2000 EN 50121-3-1:2006 EN 50121-3-1:2015 EN 50121-3-1:2017 ENV 50121-3-2:1996 EN 50121-3-2:2000	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.10 Generic EMC Standards These generic and similar standards are included in this Schedule, but limited to those referenced basic standards that are listed in Sections 8.1 to 8.9 of the Schedule.	EN 50121-3-2:2015, excluding Table 1 row 1.2 EN 50121-3-2:2016, excluding Table 1 row 1.2 ENV 50121-4:1996 EN 50121-4:2000 EN 55014-2:2015 CISPR 32: 2015 EN61000-3-3: 2013 EN 61000-6-3:2007 + A1 2011 Limited to 16A for harmonics and flicker EN 50121-4:2006 EN 50121-4:2016 ENV 50121-5:1996 EN 50121-5:2000 EN 12895:2000 EN 61326:1997 including Amendment 1:1998, Amendment 2:2001 and Amendment 3:2003 Lloyd's Register LR1:2002 EN 301 489-4: V1.3.1:2002 EN 61326-1:2006 EN 61000-6-2:2005 EN 300 386:V1.3.3:2005 EN 300 386 v1.6.1.2012 Excluding Harmonics & Flicker measurements above 16 Amps EN 301 843-1:V1.3.1:2012 EN 301 843-1:V2.2.1:2017 EN 301 489-1:V1.8.1:2008 EN 301 489-1:V1.9.2:2011 Draft EN 301 489-1:V2.1.0:2016 Final Draft EN 301 489-1:V2.1.1:2016 EN 301 489-3:V1.6.1-2013 EN 301 489-17:V2.1.1:2009 EN 301 489-17:V2.2.1:2012 Draft EN 301 489-17:V3.1.0:2016 Final Draft EN 301 489-17:V3.1.1:2016	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Pages 25,26 and 27	**8 EMC TESTS** (cont'd) 8.10 Generic EMC Standards These generic and similar standards are included in this Schedule, but limited to those referenced basic standards that are listed in Sections 8.1 to 8.9 of the Schedule. Note 1: No Radiated Susceptibility testing shall be undertaken for any commercial or military specification where this would contravene the Wireless Telegraphy Act or other local regulations. This also applies to Conducted Susceptibility tests, where the combination of the level of injection and the length of cables is likely to result in contravention of the Act.	EN 301 489-17:V3.1.1:2017 Draft EN 301 489-17:V3.2.0:2017 Draft EN 301 489-20:V2.1.0:2017 EN 301 489-23:V1.2.1:2002 EN 301 489-50:V1.2.1:2013 Draft EN 301 489-50:V2.1.0:2016 Draft EN 301 489-50:V2.2.0:2017 Boeing D6-16050-4 Rev F EN 55103-1:2009 + A1:2012 3GPP TS 25.113: V11.1.0:2015 3GPP TS 37.113:V11.1.0:2012	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Manufacturers' Sites	**9 RADIO TESTS**	ETS 300 065:1992	E
		ETS 300 067:1990 including Amendment 1:1993	
Products Tested:	Transmission Modulation	ETS 300 086:1991 including	
Radio Transmitters	Phase Error	Amendment 2 Ed1:1997	
GSM Base Stations	Mean Frequency Error	ETS 300 113:1996	
Aeronautical Transmitting	Transmitter Power	ETS 300 162:1998	
Equipment	Transmitter Power/Time	ETS 300 162-1:V1.2.2:2000	
Marine Navigation	Characteristics	ETS 300 176:1996	
Systems	Adjacent Channel Power	ETS 300 197:1994 including	
	Switching Transient Spectrum	Amendment 2 Ed 1:1997	
		ETS 300 198:1994 including	E
		Amendment 1 Ed 1:1997	
		I-ETS 300 219:1993	
		EN 300 328: V1.7.1: 2006	
		EN 300 328: V1.8.1: 2012	
		EN 300 328:v2.1.1:2016	
		EN 300 338:1998	
		EN 300 338:1999 V1.2.1	
		EN 300 338-1:V1.3.1:2010	
		EN 300 338-1:V1.4.1:2017, excluding sound pressure level testing	
		EN 300 338-2:V1.3.1:2010	
		EN 300 338-2:V1.4.1:2017, excluding sound pressure level testing	
		EN 300 338-3:V1.2.1:2017, excluding sound pressure level testing	
		EN 300 338-5:V1.2.1:2017, excluding sound pressure level testing	
		ETS 300 373:1995	
		I-ETS 300 609-1:Aug 1999	
		ETS 300 609-4:1999	
		ETS 300 630:1997	
	Transmitter Spurious	EN 300 373-1:V1.2.1:2002	E
		EN 300 373-1:V1.4.1:2013	
		EN 300 373-2:V1.2.1:2009	
		EN 300 373-3:V1.2.1:2009	
	Emissions	EN 300 086-1:V1.1.1:2001	
	Intermodulation Attenuation	EN 300 086-2:V1.2.1:2001	
	Static Reference Sensitivity,	EN 300 113-1:V1.5.1:2003	
	Blocking	EN 300 113-1:V1.6.1:2007	
	Receiver Spurious	EN 300 113-2:V1.3.1:2003	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 67	**9 RADIO TESTS** (cont'd) Response, Rejection Spurious Emissions Receiver Duplex Operation	EN 300 113-2:V1.4.1:2007 EN 301 021:Feb 2002 EN 301 087:Apr 1999 EN 301 087:V7.2.1:2000 EN 301 087:V8.3.0:2000 EN 301 087:V8.2.1:2000 EN 301 025-1:V1.1.1:1998 EN 300 698-1:V1.3.1:2003 Excluding Annex B.2.4.5 EN 300 698-1:V1.4.1:2009 Excluding Annex B EN 301 033 V1.2.1:2005 Excluding clauses 8.10 and 8.11 EN 301 033:V1.4.1:2013 EN 301 893:V2.1.1:2017 EN 301 908-1:V1.1.1:2001 EN 301 908-1:V2.2.1:2003 EN 301 908-2:V2.1.1:2003 EN 301 908-3:V11.1.3:2017 EN 301 925:V1.1.1:2002 Excluding Clauses 13.10, 13.12 to 13.14, 14.12 to 14.19, 15, 15.2 and 15.3 EN 302 502:V1.2.1:2008 EN 302 502:V2.1.1:2017 EN 302 544-1:V1.1.0 Draft:2008 EN 302 544-1:V1.1.2:2010 FCC CFR 47: Part 2:2018, excluding devices with transmit frequencies >10 GHz FCC CFR47 Part 15:2018 Excluding subparts F, G & H, excluding devices with transmit frequencies >10 GHz FCC CFR 47:Part 22:2017, excluding devices with transmit frequencies >10 GHz FCC CFR 47: Part 24:2018, excluding devices with transmit frequencies >10 GHz ANSI C63.26:2015, excluding radiated emissions >40 GHz	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 67	**9 RADIO TESTS** (cont'd)	FCC CFR 47:Part 87:2007 Clauses 87.131, 87.133, 87.135, 87.137, 87.139 and 87.141 IEC 60945:2002 inc. Corrigendum 1: 2008, Clauses 5.2.3, 7.1, 7.2, 8.2, 8.3, 8.4, 8.6, 8.7 and 8.8 EN 61023:2000 IEC 61023:2000 ISO 22090-3, Clause 6.7 (Draft):2002 RSS-130: Issue 1:2013 RSS-132:Issue 3:2013 RSS-133:Issue 6:2018 (Amendment) RSS-195 Issue 2:2014 EN 302 217-2-2:V2.2.1:2014, clauses 5.2.1, 5.2.4, 5.2.5, 5.2.7, 5.2.8 & 5.3.2 EN 302 326-1:V1.1.1:2005 EN 302 326-2:V1.1.2:2006 EN 302 326-2:V1.2.1:2007 EN 302 326-2:V1.2.2:2007 C-IS2035-0:2002 and 2007 EN 301 126-2-3:V1.2.1:2004 EN 301 390:V1.2.1:2003 FCC CFR 47: Part 27:2017 excluding devices with transmit frequencies >10 GHz TELEC 112:2008 (Final draft) RSS-139 issue 3:2015 RSS-196 Issue 1:2010 RSS-199:Issue 3:2016 RSS-GEN Issue 5:-2018 Limited to upper measurement frequency of 40 GHz ICES-003, Issue 6: 2016 FCC CFR 47:Part 90: 2017, excluding devices with transmit frequencies >10 GHz EN 303 413:V0.2.0:2016 Draft EN 303 413:V1.1.0:2017 EN 303 413:V1.1.1:2017	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
As listed on Page 67 GSM Base Stations	**9 RADIO TESTS** (cont'd)	EN 301 502:V12.5.2:2017 Draft EN 301 893:V1.8.5:2017 EN 301 908-14:V11.1.2:2017 Draft EN 301 908-14: V13.0.1: 2017 EN 301 908-18:V11.1.2:2017 Draft EN 301 908-18:V13.0.1: 2017 3GPP TS 25.141:V11.12.0:2016 3GPP TS 25.141:V13.3.0:2016 3GPP TS 36.141:V13.6.0:2017 3GPP TS 36.141:V13.9.0:2017 3GPP TS 37.141:V13.5.0:2017 3GPP TS 37.141:V13.7.0:2017 3GPP TS 37.141:V16.1.0:2019 3GPP TS 37.145-1:V14.1.0:2017 3GPP TS 37.145-1:V15.2.0:2018 3GPP TS 38.141-1:V1.0.0:2018 Clause 6.2, 6.6.3, 6.6.4, 6.6.5, 6.7, 7.2, 7.4, 7.5, 7.6 & 7.7 3GPP TS 38.141-2:V1.0.0:2018 Clause 6.2 & 7.2 3GPP TS 51.021:V12.3.0:2014 3GPP TS 51.021:V13.4.0:2017	E

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Marine Navigation Systems	**10 TESTS ON MARINE EQUIPMENT** 10.1 Automatic Identification Systems	EN 61108-1:1996 IEC 60945:1994 Sub-clauses 4.4.2, 4.4.3, 4.4.4, 4.4.7 and 4.4.8 IEC 60945:2002 inc. Corrigendum 1: 2008, Clauses 5.2.3, 7.1, 7.2, 8.2, 8.3, 8.4, 8.6, 8.7 and 8.8 IEC 60936-2:1998, Clauses 4.18.2.3, 4.18.2.4 and 4.18.2.5 only EN ISO 9875:1997 ISO 9875:2000 Accreditation for these specifications only applies when testing is performed at UKAS approved site IEC 62287-1:2010 + A1:2013 EN 62287-1:2011+A1:2014 IEC 62287-1:2017 EN 62287-1:2017 IEC 62287-2:2013 EN 62287-2:2013 IEC 62287-2:2017 EN 62287-2:2017 IEC 61993-2:2001 IEC 61993-2: 2012 EN 61097-14:2010 (all clause CFR 47 FCC Part 87s) EN 62320-1:2007 + A1:2009 EN 62320-1:2015 EN 62320-2:2008 EN 62320-2:2017 Clause 7 CCNR Ed 1.01:2007 including Edition 1:2008 CCNR Ed 2.0:2012 IEC 61162-1:2010 EN 61162-1:2011 IEC 61162-1:2016 EN 61162-1:2016 IEC 61162-2:1998 EN 61162-2:1999 IEC 61162-450:2011 EN 61162-450:2011	E A, E A A A A A A A A, E A
END			

DETAIL OF ACCREDITATION - FCC

Note: TÜV SÜD Product Service's Flexible scope does not apply to the following activities.

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
UNINTENTIONAL RADIATORS FCC Part 15, subpart B	Radiated Emissions 9 kHz to 40 GHz Conducted Emissions 9 kHz to 30 MHz	ANSI C63.4-2014	A,B
INDUSTRIAL, SCIENTIFIC AND MEDICAL EQUIPMENT Consumer ISM Equipment FCC Part 18	Radiated Emissions 9 kHz to 40 GHz Conducted Emissions 9 kHz to 30 MHz	FCC MP-5 (February 1986),	A
INTENTIONAL RADIATORS FCC Part 15, subpart C	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz 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	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
UNLICENSED PERSONAL COMMUNICATION SYSTEMS DEVICES. FCC Part 15, Subpart D	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI C63.17-2013	A
UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES WITHOUT DFS (INTENTIONAL RADIATORS) FCC Part 15, Subpart E	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI C63.10-2013 KDB Publication 789033	A, B
UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES WITH DYNAMIC FREQUENCY SELECTION (DFS) FCC Part 15 Subpart E	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard. DFS tests per new rules.	ANSI C63.10-2013 FCC KDB Publication 905462 D02 UNII DFS Compliance Procedures New Rules v01 (April 8, 2016)	A, B
ULTRA-WIDEBAND OPERATION INTENTIONAL RADIATORS FCC Part 15, Subpart F	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI C63.10-2013	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
ACCESS BROADBAND OVER POWER LINE (ACCESS BPL) FCC Part 15, Subpart G	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI C63.10-2013	A A
WHITE SPACE DEVICE INTENTIONAL RADIATORS FCC Part 15, Subpart H	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI C63.10-2013	A
COMMERCIAL MOBILE SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 22 (cellular) FCC Part 24 FCC Part 25 (non-microwave) FCC Part 27	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D KDB Publication 971168	A
GENERAL MOBILE RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 22 (non-cellular) FCC Part 90 (non-microwave) FCC Part 95 FCC Part 97 FCC Part 101 (non-microwave)	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D	A

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 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D KDB Publication 971168	A
MARITIME AND AVIATION RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 80 FCC Part 87	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D	A
MICROWAVE AND MILLIMETRE BANDS RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 25 FCC Part 74 FCC Part 90 (90Y, 90Z, DSRC) FCC Part 101	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
BROADCAST RADIO SERVICES (FCC LICENSED RADIO SERVICE EQUIPMENT) FCC Part 73 FCC Part 74 (non-microwave)	Radiated Tests 9 kHz to 40 GHz Conducted Tests 9 kHz to 40 GHz Radio tests as per standard.	ANSI/TIA-603-D	A
RF EXPOSURE Devices subject to SAR Requirements	Specific Absorption Rate 450 MHz to 6 GHz Using the DAYS 6 systems	IEEE Std 1528™-2013 KDB Publication 865664 KDB Publication 447498	A
SIGNAL BOOSTERS Wideband Consumer signal boosters Provider-specific signal boosters Industrial signal boosters FCC Part 20	Tests as per KDB Frequency Bands Self-monitoring 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	FCC KDB Publication 935210 D03 Signal Booster Measurements v04 (February 12, 2016) FCC KDB Publication 935210 D04 Provider Specific Booster Measurements v02 (February 12, 2016) FCC KDB Publication 935210 D05 Indus Booster Basic Meas v01r01 (February 12, 2016)	A

Canadian MRA - ISED Scope of Accreditation			
			Location Code
General Requirements for Compliance of Radio Apparatus	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-Gen Issue 5:2018 ANSI C63.4:2014 ANSI C63.10:2013 ANSI C63.17:2013 ANSI C63.26:2015	A, B
Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus	450 MHz to 6 GHz	RSS-102 Issue 5, March 2015 SAR & RF Exposure Evaluation	A
Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus - Supplementary Procedure for Assessing Compliance with RSS-102 Nerve Stimulation Exposure Limits	10 Hz to 400 kHz	RSS-102 Issue 5, March 2015 Nerve Stimulation SPR-002 Issue 1, September 2016	A
Broadband Public Safety Equipment Operating in the Band 4940-4990 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-111 Issue 5, September 2014	A
Land Mobile and Fixed Equipment Operating in the Band 1670-1675 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-112 Issue 1, February 2008	A
Land and Coast Station Transmitters Operating in the Band 200-535 kHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-117 Issue 3, January 2016	A
Land Mobile and Fixed Equipment Operating in the Frequency Range 7.41-960 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-119 Issue 12, May 2015	A

Licensed Low-Power Radio Apparatus	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-123 Issue 3, February 2015 Updated in February 2015	A
Land Mobile and Fixed Radio Transmitters and Receivers 1.705 to 50.0 MHz, Primarily Amplitude Modulated	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-125 Issue 2, Revision 1, March 2000	A
Air-Ground Equipment Operating in the Bands 849-851 MHz and 894-896 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-127 Issue 1, August 2009	A
Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-130 Issue 2, February 2019	A
Zone Enhancers	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-131 Issue 3, updated May 2017	A
Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-132 Issue 3, Updated January 2013	A
2 GHz Personal Communications Services	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-133 Issue 6, January 2013 Updated January 2018 Amendment January 2018	A
Digital Scanner Receivers	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-135 Issue 2, June 2009	A
Location and Monitoring Service in the Band 902-928 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-137 Issue 2, February 2009	A

Advanced Wireless Services Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-139 Issue 3, July 2015	A
Aeronautical Radiocommunication Equipment in the Frequency Band 117.975-137 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-141 Issue 2, June 2010	A
Narrowband Multipoint Communication Systems in the Bands 1429.5-1432 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-142 Issue 5, April 2013	A
Mobile Earth Stations (MESs) and Ancillary Terrestrial Component (ATC) Equipment Operating in the Mobile-Satellite Service (MSS) Bands	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-170 Issue 3, July 2015	A
Coast and Ship Station Single Sideband Radiotelephone Transmitters and Receivers Operating in the 1 605-28 000 kHz Band	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-181 Issue 1, April 1971 Amendment July 1987	A
Maritime Radio Transmitters and Receivers in the Band 156-162.5 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-182 Issue 5, January 2012	A
Local Multipoint Communication Systems in the Band 25.35-28.35 GHz; Point-to-Point and Point-to-Multipoint Broadband Communication Systems in the Bands 24.25-24.45 GHz and 25.05-25.25 GHz; and Point-to-Multipoint Broadband Communications in the Band 38.6-40.0 GHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-191 Issue 3, April 2008	A

Fixed Wireless Access Equipment Operating in the Band 953-960 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-194 Issue 1, October 2007	A
Wireless Communications Service Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-195 Issue 2, April 2014	A
Point-to-Multipoint Broadband Equipment Operating in the Band 512-608 MHz for Rural Remote Broadband Systems (RRBS) (TV Channels 21 to 36)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-196 Issue 2, February 2019	A
Wireless Broadband Access Equipment Operating in the Band 3650-3700 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-197 Issue 1, February 2010	A
Broadband Radio Service (BRS) Equipment Operating in the Band 2500-2690 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-199 Issue 3, December 2016	A
Licence-Exempt Radio Apparatus: Category I Equipment	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-210 Issue 9, August 2016 (Amendment November 2017)	A
Level Probing Radar Equipment	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-211 Issue 1, March 2015	A
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	A
Analogue Scanner Receivers	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-215 Issue 2, June 2009	A

Wireless Power Transfer Devices	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-216 Issue 2, January 2016	A
Ultra-Wideband (UWB) Technology	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-220 Issue 1, March 2009 (Amendment July 2018)	A
White Space Devices (WSDs)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-222 Issue 1, February 2015	A
General Radio Service Equipment Operating in the Band 26.960 to 27.410 MHz (Citizens Band)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-236 Issue 1, September 2012	A
Shipborne Radar in the 2900-3100 MHz and 9225-9500 MHz Bands	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-238 Issue 1, July 2013	A
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	A
Medical Devices Operating in the Band 413-457 MHz	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-244 Issue 1, June 2013	
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 2:2017	A, B
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	A

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	A
Global Maritime Distress and Safety System (GMDSS)	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-288 Issue 1, January 2012	A
Licence-Exempt Radio Apparatus: Category II Equipment	Conducted and Radiated Tests 9 kHz to 110 GHz	RSS-310 Issue 4, July 2015	A
END			