Schedule of Accreditation

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Thales UK Ltd

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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 EMC Laboratory Manor Royal Crawley West Sussex RH10 9HA	**Local contact** Tom Thorne Tel:+44(0)1293 587864 Email: EMC@uk.thalesgroup.com or tom.thorne@uk.thalesgroup.com	EMC	A
Address Environmental Laboratory Manor Royal Crawley West Sussex RH10 9HA	**Local contact** Mr Tony Knight Tel:+44(0)1293 581957 Email: tony.knight@uk.thalesgroup.com	Environmental	B

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
Electrical / Electronic Products Office Equipment Radar Equipment Satellite subassemblies Security Devices & Alarms Sonar Equipment Telecommunications Equipment Defence Equipment ESM/ECM Equipment Missile Systems Electrical/Electronic Products	EMC Tests Section 1 1.0 Conducted Emissions 20 Hz to 150 MHz and exported transients power supply, control and signal lines Antenna Terminals 10 kHz to 18 GHz, Rx only	DEF STAN 59-41, Issue 1 2003 DCE01.3, DCE02.3, DCE03.3 DEF STAN 59-411 iss 1 & 2 DCE01.B, DCE02.B, DCE03.B RTCA DO 160 E & G Section 21 MIL-STD 461 E CE101, CE102, CE106 MIL-STD 461 F & G CE101, CE102, CE106 AECTP 500 iss 5 2016 NCE04, NCE05	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	EMC Tests Section 1 (Cont.) 1.1 Radiated Emissions E and H-field: 20 Hz to 18 GHz	DEF STAN 59-41 issue 1, 2003 DRE01.3, DRE02.3 DEF STAN 59-411 iss 1 & 2 DRE01.B, DRE02.B MIL-STD 461 E RE101, RE102 MIL-STD 461 F & G RE101, RE102 RTCA DO160 E & G Section 21 AECTP 500 iss 5 2016 NRE01, NRE02	A
	1.2 Conducted Susceptibility 20 Hz to 400 MHz	DEF STAN 59-41 issue 1, 2003 DCS01.3, DCS02.3, DCS03.3 DEF STAN 59-411 iss 1 & 2 DCS01.B, DCS02.B, DCS03.B MIL-STD 461 E CS101, CS114 MIL-STD 461 F & G CS101, CS114 RTCA DO 160 E & G Section 17, Section 18, Section 20 (Conducted) AECTP 500 iss 5 2016 NCS01, NCS07	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	EMC Tests Section 1 (Cont.)		
	1.3 Radiated Susceptibility E and H-field: 20 Hz to 18 GHz (Maximum E-Field test capability 200V/m)	DEF STAN 59-41 issue 1, 2003 DRS01.3, DRS02.3 DEF STAN 59-411 iss 1 & 2 DRS01.B, DRS02.B MIL-STD 461 E RS101, RS103 MIL-STD 461 F & G RS101, RS103 AECTP 500 iss 5 2016 NRS01, NRS02	A
	Induced Signal Susceptibility	RTCA DO 160 E & G Sections 19.3.1, 19.3.2, 19.3.3 and 20 (Radiated)	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	ENVIRONMENTAL TESTS **CLIMATIC** - Single Parameters		B
Electrical / Electronic Products Office Equipment Radar Equipment Satellite subassemblies Security Devices & Alarms Sonar Equipment Telecommunications Equipment Defence Equipment ESM/ECM Equipment Missile Systems Electrical/Electronic Products	**HIGH TEMPERATURE** Max temp: +120°C Chamber size: 1.8m x 2m x1.8m (WxDxH)	BS EN 60068-2-2:Bb:1993 BS EN 60068-2-2:Ba:1993 BS EN 60068-2-2:B 2007 BS 3G100:Part 2 Sub-Sect 3.2:1970 DEF STAN 07-55:1975 Test B1 DEF STAN 07-55:1975 Test B2 MIL-STD-810D:1983 Method 501.2 MIL-STD-810E:1989 Method 501.3 MIL-STD-810F:2000 Method 501.4 MIL-STD-810G:2008 Method 501.5 MIL-STD-810G:CN1 2014 Method 501.6 MIL-STD-810H:2019 Method 501.7 RTCA DO-160C: Sect 4:1989 RTCA DO-160D: Sect 4:1997 RTCA DO-160E: Sect 4:2004 RTCA DO-160F: Sect 4:2007 RTCA DO-160G: Sect 4:2010 RTCA DO-160G:CN1:Sect 4:2014 DEF STAN 00-35 Issue 3 - CL1 DEF STAN 00-35 Issue 4 – CL2 DEF STAN 00-035 Iss 5 – CL2	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	LOW TEMPERATURE Min temp: -70°C Chamber size: 1.8m x 2m x1.8m (WxDxH)	BS EN 60068-2-1:Ab:2007 BS EN 60068-2-1:Aa:2007 BS 3G100:Part 2 Sect 3.2:1970 DEF STAN 07-55:1975 Test B4, B5 MIL-STD-810D:1983 Method 502.2 MIL-STD-810E:1989 Method 502.3 MIL-STD-810F:2000 Method 502.4 MIL-STD-810G:2008 Method 502.5 MIL-STD-810G:CN1 2014 Method 502.6 MIL-STD-810H: 2019 Method 502.7 RTCA DO-160C: Sect 4:1989 RTCA DO-160D: Sect 4:1997 RTCA DO-160E: Sect 4:2004 RTCA DO-160F: Sect 4:2007 RTCA DO-160G: Sect 4:2010 RTCA DO-160G: CN1 Sect 4:2014 DEF STAN 00-35 Issue 3 - CL4 DEF STAN 00-35 Issue 4- CL54 DEF STAN 00-035 Iss 5 – CL54	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	TEMPERATURE CHANGE Thermal Shock Manual Transfer Max temp: +120°C Min temp: -70°C Limiting chamber size: 1m x.0.93mx1.09m (WxDxH)	BS EN 60068-2-14:2009 Na DEF STAN 07-55, Test B14, Proc A MIL-STD-810C:1975 Method 503.1 MIL-STD-810D:1983 Method 503.2 MIL-STD-810E:1989 Method 503.3 MIL-STD-810F:2000 Method 503.4 MIL-STD-810G:2008 Method 503.5 MIL-STD-810G:CN1:2014 Method 503.6 MIL-STD-810H:2019 Method 503.7 RTCA DO-160E: Sect 5:2004 RTCA DO-160F: Sect 5:2007 RTCA DO-160G: Sect 5:2010 RTCA DO-160G:CN1 Sect 5:2014	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	HUMIDITY - Steady State Temp range: +20°C to +70°C Humidity range: 60%rh to 98%rh Max chamber size: 1.8m x 2m x1.8m (WxDxH)	DEF STAN 07-55:1975, Test B7 BS EN 60068-2-78:2013 Cab DEF STAN 00-35 Issue 3 - CL7 DEF STAN 00-35 Issue 4 - CL7 DEF STAN 00-035 Issue 5 - CL7	B
	HUMIDITY - Cyclic Temp range: +20°C to +70°C Humidity range: 60%rh to 98%rh Max chamber size: 1.8m x 2m x1.8m (WxDxH))	BS EN 60068-2-30:2005 Db BS G100:Part 2, sub-sect 3.7:1972 DEF STAN 00-035 Pt3 Issue 5 CL6 DEF STAN 07-55:1975, Test B6 MIL-STD-810C:1975, Method 507.1 MIL-STD-810D:1983, Method 507.2 MIL-STD-810E:1989, Method 507.3 MIL-STD-810F:2000, Method 507.4 MIL-STD-810G:2008, Method 507.5 MIL-STD-810G:CN1 2014 Method 507.6 MIL-STD-810H:2019 Method 507.6 RTCA DO-160C: Sect 6:1989 RTCA DO-160D: Sect 6:1997 RTCA DO-160E: Sect 6:2004 RTCA DO-160F: Sect 6.:2007 RTCA DO-160G: Sect 6:2010 RTCA DO-160G:CN1 Sect 6:2004	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	DYNAMIC – Single / Combined Parameters **VIBRATION -SINUSOIDAL** Electrodynamic: Freq range: 5 Hz to 2 kHz Peak thrust: 28 kN Max displacement: 50mm Freq range: 5 Hz to 2 kHz Peak thrust: 5.4 kN Max displacement: 25mm Temperature range -54ºC to +120ºC Chamber size 1m x 0.93m x 1.09m	BS EN 60068-2-6:2008 DEF STAN 07-55:1975:Test A1 MIL-STD 810D:1983 Method 514.3 MIL-STD 810E:1989 Method 514.4 MIL-STD 810F:2000 Method 514.5 MIL-STD 810G:2008 Method 514.6 MIL-STD 810G:CN1 2014 Method 514.7 MIL-STD 810H:2019 Method 514.8 BS 3G100:Part 2 Sub-Sect 3.1:1969(1982) RTCA DO-160D: Sect 8:1997 RTCA DO-160E: Sect 8:2004 RTCA DO-160F: Sect 8:2007 RTCA DO-160G: Sect 8:2010 RTCA DO-160G:CN1 Sect 8:2014 DEF STAN 00-35 Issue 3 - M1 DEF STAN 00-35 Issue 4 - M1 DEF STAN 00-035 Issue 5 - M1	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	VIBRATION - RANDOM Electrodynamic: Freq range: 5 Hz to 2 kHz Peak thrust: 28 kN Max displacement: 50mm Freq range: 5 Hz to 2 kHz Peak thrust: 5.4 kN Max displacement: 25mm Temperature range -54ºC to +120ºC Chamber size 1m x 0.93m x 1.09m	BS EN 60068-2-64:2008 BS EN 60068-2-64:2008+A1 2019 IEC 60068-2-64:2008 BS 3G100:Part 2 Sub-Sect 3.1:1969(1982) DEF STAN 07-55:1975:Test A2 MIL STD 810D:1983 Method 514.3 MIL STD 810E:1989 Method 514.4 MIL STD 810F:2000 Method 514.5 MIL STD 810G:2008 Method 514.6 MIL STD 810G:CN1:2014 Method 514.7 MIL-STD 810H:2019 Method 514.8 MIL-STD-202F, Method 214 RTCA DO-160D:8:1997 RTCA DO-160E:8:2004 RTCA DO-160F:8:1997 RTCA DO-160G: Sect 8:2010 RTCA DO-160G:CN1 Sect 8:2014 DEF STAN 00-35 Issue 3 - M1 DEF STAN 00-35 Issue 4 - M1 DEF STAN 00-035 Issue 5 - M1	B
	SHOCK Half Sine, Triangular, Sawtooth, Rectangular, Trapezoidal, User Defined **Electrodynamic:** Freq range: 5 Hz to 2 kHz Peak thrust: 28 kN Max displacement: 50mm Freq range: 5 Hz to 2 kHz Peak thrust: 5.4 kN Max displacement: 25mm Temperature range -54ºC to +120ºC Chamber size 1m x 0.93m x 1.09m	BS EN 60068-2-27:1993 BS EN 60068-2-27:2009 DEF STAN 00-35 Issue 3 – M3 DEF STAN 00-35 Issue 4 – M3 DEF STAN 00-035 Issue 5 – M3 RTCA DO-160G:CN1 Sect 7 :2014	B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
	CLIMATIC / DYNAMIC Combined Parameters **HIGH / LOW TEMPERATURE VIBRATION AND SHOCK** Electrodynamic: Freq range: 5 Hz to 2 kHz Peak thrust: 28 kN Max displacement: 50mm Freq range: 5 Hz to 2 kHz Peak thrust: 20 kN Max displacement: 24mm	Temperature and Vibration Procedures 03-103-118913 High Low Temp Issue01 02-103-118912 Vibration Issue 01	B
Facilities			
Power supplies offered 1 Phase: 240V, 50 Hz, 32A 1 Phase: 240V, 50 Hz, 13A (standard plug-top) 3 Phase: 415V line to line, 50 Hz, 32A per phase 3 Phase: 200V line to line, 400 Hz, 32A per phase 3 Phase: 440V line to line, 60Hz, 32A per phase 3 phase: 115V line to line, 60Hz, 50A per phase DC: 0 - 60V, 50 A max **General** Laboratory is secure to allow for handling/storage of equipment and documentation up to HMG Top Secret. Minimum 3m access to all chambers and vibration systems. 1 ton 2 directional crane in vibration rooms.			B

Facilities	Location Code
Chamber 1 Anechoically lined screened test chamber, compliant with EN 55016-2-3: 2006 site attenuation requirements for 3m OATS. Equipped with 2 tonne, turntable, flush with floor, and 4m-antenna mast, all operating under computer control. Also compliant with site attenuation requirements for DEF STAN 59-411, man-worn/man-portable equipment (Annex A), and field uniformity requirements for EN61000-4-3, DEF STAN 59-411, MIL-STD 461E/F, RTCA DO-160E Chamber dimensions are nominally 11m long x 6m wide x 6m high. **Chamber 2** Identical in construction to Chamber 1, but smaller, and without turntable. Compliant with field uniformity requirements for EN61000-4-3, DEF STAN 59-411, MIL-STD 461E/F, RTCA DO-160E Chamber dimensions are nominally 7.2m long x 4.8m wide x 4m high **Screened Control Room** Interlinks the two test chambers. All facilities mirrored on both sides of room to allow for simultaneous, independent working in both test chambers. **Power supplies** Capability common to both test chambers and control room, with supplies mirrored outside each chamber: 1 Phase: 240V, 50 Hz, 32A 1 Phase: 240V, 50 Hz, 13A (standard plug-top) 3 Phase: 415 line to line, 50 Hz, 63A per phase 3 Phase: 200V line to line, 400 Hz, 63A per phase 3 Phase: 440 V line to line, 60Hz, 63A per phase 3 phase: 115V line to line, 60Hz, 50A per phase DC: 0 - 60V, 50 A max **General** Laboratory is secure to allow for handling/storage of equipment and documentation up to HMG Top Secret. Chamber and control room screening performance, 100dB up to 40GHz Absorber performance, –35dB return loss at 40GHz Both main chamber door apertures are nominally 2.4m wide x 2.7m high, and all chamber access doors are lockable. Direct vehicular access to both chambers from outside the building. Maximum distributed weight 4 tonnes. Low door thresholds (30mm) and integral ramp systems allow for easy handling of large and heavy loads. Fully equipped workshop with ESSD handling facilities for repair/investigation work on customers' equipment when necessary.	A
END	