National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 100280-0

Emissions

Designation	***Description***
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emission of Radio Frequency
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emission of Radio Frequency Energy
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.3: RF Emissions, Conducted
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.3: RF Emissions, Conducted
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.4: RF Emissions, Radiated
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emissions of Radio Frequency Energy
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.4: RF Emissions, Conducted
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.5: RF Emissions, Radiated

For the National Voluntary Laboratory Accreditation Program

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RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.4: RF Emissions, Conducted
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21.5: RF Emissions, Radiated
IEC/CISPR 25, 2nd ed. (2002-08)	Radio disturbance characteristics for the protection of receivers used on board vehicles, boats, and on devices - Limits and methods of measurement: Sections 6.2, 6.3, 6.4, & 6.5
IEC/CISPR 25, Ed. 3.0 (2008-03)	Radio disturbance characteristics for the protection of receivers used on board vehicles, boats, and on devices - Limits and methods of measurement
DEF-STAN 59-41 Part 3, DCE01 (1995-10)	Conducted Emission on Primary Power Lines
DEF-STAN 59-41 Part 3, DCE02 (1995-10)	Conducted Emission on Control Signal and Power Lines
DEF-STAN 59-41 Part 3, DCE03 (1995-10)	Exported Transients Power Lines
DEF-STAN 59-41 Part 3, DRE01 (1995-10)	Radiated Emissions E Field
DEF-STAN 59-41 Part 3, DRE02 (1995-10)	H Field Radiation
DEF-STAN 59-41 Part 3, DRE03 (1995-10)	Radiated Emissions Installed Antenna
Defense Standard 59-411 Part 3 Issue 1 (2007) + A1	Electromagnetic Compatibility Test Methods and Limits for Equipment and Sub Systems
MIL-STD-704, Revision F (March 12, 2004)	Aircraft, Electric Power Characteristics

Immunity

Designation	***Description***
ISO 10605, First Edition (2001-12-15)	Road vehicles - Test methods for electrical disturbances from electrostatic discharge.
ISO 10605 (2008)	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge
ISO 10605 (2001) using DC-10614	Road vehicles - Test methods for electrical disturbances from electrostatic discharge using Daimler Chrysler DC-10614
ISO 10605 (2001) using Ford ES-XW7T-1A278-AC	Road vehicles - Test methods for electrical disturbances from electrostatic discharge, First Ed., 2001-12-15 using Ford ES-XW7T-1A278-AC
ISO 10605 (2001) using GMW3097	Road vehicles - Test methods for electrical disturbances from electrostatic discharge using General Motors GMW3097

ISO 11451-2 (2005)	Road vehicles -- Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 2: Off-vehicle radiation sources
ISO 11451-4 (2006)	Road vehicles -- Vehicle test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 4: Bulk current injection (BCI)
ISO 11452-1 (2005)	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 1: General principles and terminology
ISO 11452-2 (2004)	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 2: Absorber-lined shielded enclosure
ISO 11452-3 (2001)	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 3: Transverse electromagnetic mode (TEM) cell
ISO 11452-4 (2001)	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 4: Bulk current injection (BCI)
ISO 11452-4 (2005)	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 4: Bulk current injection (BCI)
ISO 11452-4 (2011)	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 4: Harness excitation methods
ISO 11452-5 (2002)	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 5: Stripline
ISO 11452-11:2010	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 11: Reverberation chamber
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 17: Voltage Spike
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility - Power Inputs
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 19: Induced Signal Susceptibility
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20: Radio Frequency Susceptibility (Radiated and Conducted)
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect

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RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 17: Voltage Spike
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility - Power Inputs
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 19: Induced Signal Susceptibility
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20: Radio Frequency Susceptibility (Radiated and Conducted)
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.6: Radio Frequency Susceptibility (Radiated Mode Tuned)
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 25: Electrostatic Discharge (ESD)
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effects
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 17: Voltage Spikes
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 19: Induced Signal Susceptibility
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.4: RF Susceptibility, Conducted
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.6: RF Susceptability (Radiated Mode Tuned)
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 25: Electrostatic Discharge (ESD)
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect

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RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 17: Voltage Spike
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Suspceptibility - Power Inputs
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 19: Induced Signal Susceptibility
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20: Radio Frequency Susceptibility (Radiated and Conducted)
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 23: Lightning Direct Effects
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 25: Electrostatic Discharge (ESD)
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effects
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 17: Voltage Spikes
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Suspectibility - Power Inputs
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 19: Induced Signal Susceptibility
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.4: RF Susceptibility, Conducted
RTCA/D0-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.5: RF Susceptibility, Radiated
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.6: RF Susceptibility (Mode-Stirred)
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 25: Electrostatic Discharge (ESD)

DEF-STAN 59-41 Part 3, DCS01 (1995-10)	Conducted Susceptibility, Primary Power Lines
DEF-STAN 59-41 Part 3, DCS02 (1995-10)	Conducted Susceptibility, Primary Control and Signal Lines
DEF-STAN 59-41 Part 3, DCS03 (1995-10)	Conducted Susceptibility, Control and Signal Lines
DEF-STAN 59-41 Part 3, DCS04 (1995-10)	Imported Transient Susceptibility
DEF-STAN 59-41 Part 3, DCS05 (1995-10)	Enternally Generated Transients
DEF-STAN 59-41 Part 3, DCS06 (1995-10)	Imported Long Transients Susceptibility AC/DC Systems
DEF-STAN 59-41 Part 3, DCS07 (1995-10)	Imported Short Transient Susceptibility (Land Service)
DEF-STAN 59-41 Part 3, DCS08 (1995-10)	Externally Generated Transients (Aircraft)
DEF-STAN 59-41 Part 3, DCS09 (1995-10)	Imported Lightning Transients Susceptibility (Aircraft)
DEF-STAN 59-41 Part 3, DCS10 (1995-10)	Electrostatic Discharge (Aircraft)
DEF-STAN 59-41 Part 3, DCS11 (1995-10)	Imported Long Transient Susceptibility - Power Lines (Sea Systems)
DEF-STAN 59-41 Part 3, DCS12 (1995-10)	Low Frequency Transient Susceptibility - Power Lines (Sea Systems)
DEF-STAN 59-41 Part 3, DRS01 (1995-10)	H Field Susceptibility
DEF-STAN 59-41 Part 3, DRS02 (1995-10)	E Field Susceptibility
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.5: RF Susceptibility, Radiated

MIL-STD

Designation	***Description***
MIL-STD-1399 Section 070	Interface standard for shipboard systems, Section 070 - Part 1- DC Magnetic Field Environment

MIL-STD: Conducted Emissions

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Designation	***Description***
MIL-STD-462, CE01	Conducted Emissions, Power and Interconnecting Leads, Low Frequency (up to 15 kHz)
MIL-STD-462, CE02	Conducted Emission, 30 Hz to 20 kHz, Control and Signal Leads
MIL-STD-462, CE03	Conducted Emissions, Power and Interconnecting Leads, 0.015 to 50 MHz
MIL-STD-462, CE04	Conducted Emissions, Control and Signal Leads, 30 Hz to 20 kHz
MIL-STD-462, CE06	Conducted Emissions, Antenna Terminals 10 kHz to 26 GHz
MIL-STD-462, CE07	Conducted Emissions, Power Leads, Spikes, Time Domain
MIL-STD-462D, CE101	Conducted Emissions, Power Leads, 30 Hz to 10 kHz
MIL-STD-462D, CE102	Conducted Emissions, Power Leads, 10 kHz to 10 MHz
MIL-STD-462D, CE106	Conducted Emissions, Antenna Terminal, 10 kHz to 40 GHz
MIL-STD-461 E-G, CE101	Conducted Emissions, Power Leads, 30 Hz to 10 kHz
MIL-STD-461 E-G, CE106	Conducted Emissions, Antenna Terminal, 10 kHz to 40 GHz
MIL-STD-461 E-G, CE102	Conducted Emissions, Power Leads, 10 kHz to 10 MHz

MIL-STD: Conducted Susceptibility

Designation	***Description***
MIL-STD-462, CS01	Conducted Susceptibility, Power Leads, 30 Hz to 50 kHz
MIL-STD-462, CS02	Conducted Susceptibility, Power Leads, 0.05 to 400 MHz
MIL-STD-462, CS06	Conducted Susceptibility, Spikes, Power Leads
MIL-STD-462, CS10	Conducted Susceptibility, Damped Sinusoidal Transients, Pins and Terminals, 10 kHz to 100 MHz
MIL-STD-462, CS11	Conducted Susceptibility, Damped, Sinusoidal Transients, Cable, 10 kHz to 100 MHz
MIL-STD-462, CS12	Conducted Susceptibility, Common-mode cable current pulse, interconnecting power
MIL-STD-462, CS13	Conducted Susceptibility, Single Wire coupled pulse
MIL-STD-462D, CS101	Conducted Susceptibility, Power Leads, 30 Hz to 50 kHz
MIL-STD-462D, CS103	Conducted Susceptibility, Antenna Port, Intermodulation, 15 kHz to 10 GHz
MIL-STD-462D, CS104	Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals, 30 Hz to 20 GHz

MIL-STD-462D, CS105	Conducted Susceptibility, Antenna Port, Cross-Modulation, 30 Hz to 20 GHz
MIL-STD-462D, CS114	Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 400 MHZ
MIL-STD-462D, CS115	Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation
MIL-STD-462D, CS116	Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz
MIL-STD-461F, CS106	Conducted Susceptibility, Transients, Power Leads
MIL-STD-461G, CS117	Conducted Susceptibility, Lightning Induced Transients, Cables and Power Leads
MIL-STD-461G, CS118	Personnel Borne Electrostatic Discharge (ESD)
MIL-STD-461 E-G, CS101	Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz
MIL-STD-461 E-G, CS103	Conducted Susceptibility, Antenna Port, Intermodulation, 15 kHz to 10 GHz
MIL-STD-461 E-G, CS104	Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals, 30 Hz to 20 GHz
MIL-STD-461 E-G, CS105	Conducted Susceptibility, Antenna Port, Cross-Modulation, 30 Hz to 20 GHz
MIL-STD-461 E-G, CS114	Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 200 MHz
MIL-STD-461 E-G, CS115	Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation
MIL-STD-461 E-G, CS116	Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz

MIL-STD: Radiated Emissions

Designation	***Description***
MIL-STD-462, RE01	Radiated Emissions, Magnetic Field, 0.03 to 50 kHz
MIL-STD-462, RE02	Radiated Emissions, Electric Field, 10 kHz to 18 GHz
MIL-STD-462, RE03	Radiated Emissions, Spurious and Harmonics, Radiated Technique
MIL-STD-462D, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-462D, RE102	Radiated Emissions, Electric Field, 10 kHz to 18 GHz
MIL-STD-462D, RE103	Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10 kHz to 40 GHz
MIL-STD-461 E-G, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461 E-G, RE102	Radiated Emissions, Electric Field, 10 kHz to 18 GHz

MIL-STD-461 E-G, RE103	Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10 kHz to 40 GHz

MIL-STD: Radiated Susceptibility

Designation	***Description***
MIL-STD-462, RS01	Radiated Susceptibility, Magnetic Field, 0.03 to 50 kHz
MIL-STD-462, RS02	Radiated Susceptibility, Magnetic and Electric Fields, Spikes and Power Frequencies
MIL-STD-462, RS03	Radiated Susceptibility, Electric Field, 14 kHz to 40 GHz (Consult laboratory for field strengths available)
MIL-STD-462, RS03	Radiated Susceptibility, Electric Field, 14 kHz to 40 GHz, employing RADHAZ procedures for high level testing (Consult laboratory for field strengths available)
MIL-STD-462, RS05	Radiated Susceptibility, Electromagnetic Pulse Field Transient
MIL-STD-462 RS06	Radiated Susceptibility, Electromagnetic Field, Switching Pulses (Chattering Relay)
MIL-STD-462D, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-462D, RS103	Radiated Susceptibility, Electric Field, 10 kHz to 40 GHz
MIL-STD-462D, RS105	Radiated Susceptibility, Transient Electromagnetic Field
MIL-STD-461 E-G, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461 E-G, RS103	Radiated Susceptibility, Electric Field, 2 MHz to 40 GHz
MIL-STD-461 E-G, RS105	Radiated Susceptibility, Transient Electromagnetic Field