

### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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### ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

# NVLAP LAB CODE 200422-0

#### Immunity

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<u>Designation</u>	Description
RTCA/DO-160C (1989)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 15: Magnetic Effect
RTCA/DO-160E (2004)	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 15: Magnetic Effects
RTCA/DO-160C (1989)	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 16: Power Input
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input

For the National Voluntary Laboratory Accreditation Program

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RTCA/DO-160E (2004)	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 16: Power Input
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.4: RF Susceptibility, 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 22: Lightning Induced Transient Susceptibility
RTCA/DO-160F (2007)	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 22: Lightning Induced Transient Susceptibility
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 22: Lightning Induced Transient Susceptibility
MIL-STD	
<u>Designation</u>	<b>Description</b>
MIL-STD-1275A	Characteristics of 28 Volts DC Electrical Systems in Military Vehicles
MIL-STD-1275A Notice 1	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1275A Notice 2	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1275B Notice 1	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles

MIL-STD-1275A	Characteristics of 28 Volts DC Electrical Systems in Military Vehicles
MIL-STD-1275A Notice 1	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1275A Notice 2	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1275B Notice 1	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1275D	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles
MIL-STD-1399 Section 070	Interface standard for shipboard systems, Section 070 - Part 1- DC Magnetic Field Environment
MIL-STD 1399 Section 300A	Interface standard for Shipboard Systems: Electric Power, Alternating Current
MIL-STD-461A	Electromagnetic Interference Characteristics Requirements for Equipment (CE03, CE04, RE02, RS03)
MIL-STD-462: 1967 with Notices 1, 2, 3, 4, 5, 6	Military Standard, Electromagnetic Interference Characteristics, Measurement of. Notice 1:1968; Notice 2:1970; Notice 3: 1971; Notice 4:1980; Notice 5:1986; Notice 6:1987 (CE03, CE04, RE02, RS03)
MIL-STD-704, (1959)	Aircraft Electrical Power Characteristics

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MIL-STD-704, Revision A (August 9, 1966)	Aircraft Electrical Power Characteristics
MIL-STD-704, Revision B (November 17,1975)	Aircraft Electrical Power Characteristics
MIL-STD-704, Revision C (December 30, 1977)	Aircraft Electrical Power Characteristics
MIL-STD-704, Revision D (September 30, 1980)	Aircraft Electrical Power Characteristics
MIL-STD-704, Revision E (May 1, 1992)	Aircraft Electrical Power Characteristics
MIL-STD-704, Revision F (March 12, 2004)	Aircraft, Electric Power Characteristics
DEF-STAN 59-411 Part 3 (2014)	Electromagnetic Compatibility Part 3: Test Methods and Limits for Equipment and Sub Systems
	Radiated Emissions Electric and Magnetic Fields; Radiated Susceptibility Electric Field
DEF-STAN 61-5 Part 6 (2009)	Nominal 12 V and 24 V DC Electrical Systems in Military Platforms

#### **MIL-STD: Conducted Emissions**

<u>Designation</u>	<u>Description</u>
MIL-STD-461G, CE101	Conducted Emissions, Power Leads, 30 Hz to 10 kHz
MIL-STD-461E, CE101	Conducted Emissions, Power Leads, 30 Hz to 10 kHz
MIL-STD-461F, CE101	Conducted Emissions, Power Leads, 30 Hz to 10 kHz
MIL-STD-461G, CE102	Conducted Emissions, Power Leads, 10 kHz to 10 MHz
MIL-STD-461E, CE102	Conducted Emissions, Power Leads, 10 kHz to 10 MHz
MIL-STD-461F, CE102	Conducted Emissions, Power Leads, 10 kHz to 10 MHz
MIL-STD-461G, CE106	Conducted Emissions, Antenna Terminal, 10 kHz to 40 GHz
MIL-STD-461E, CE106	Conducted Emissions, Antenna Terminal, 10 kHz to 40 GHz
MIL-STD-461F, CE106	Conducted Emissions, Antenna Terminal, 10 kHz to 40 GHz
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

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#### NVLAP LAB CODE 200422-0

MIL-STD-462, CE03	Conducted Emissions, Power and Interconnecting Leads, 0.015 to 50 MHz
MIL-STD-462C, 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-462C, CE06	Conducted Emissions, Antenna Terminals 10 kHz to 26 GHz
MIL-STD-462, CE07	Conducted Emissions, Power Leads, Spikes, Time Domain
MIL-STD-462C, 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: Conducted Susceptibility**

<u>Designation</u>	<u>Description</u>
MIL-STD-461G, CS101	Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz
MIL-STD-461E, CS101	Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz
MIL-STD-461F, CS101	Conducted Susceptibility, Power Leads, 30 Hz to 150 kHz
MIL-STD-461G, CS103	Conducted Susceptibility, Antenna Port, Intermodulation, 15 kHz to 10 GHz
MIL-STD-461E, CS103	Conducted Susceptibility, Antenna Port, Intermodulation, 15 kHz to 10 GHz
MIL-STD-461F, CS103	Conducted Susceptibility, Antenna Port, Intermodulation, 15 kHz to 10 GHz
MIL-STD-461G, CS104	Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals, 30 Hz to 20 GHz
MIL-STD-461E, CS104	Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals, 30 Hz to 20 GHz
MIL-STD-461F, CS104	Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals, 30 Hz to 20 GHz
MIL-STD-461G, CS105	Conducted Susceptibility, Antenna Port, Cross-Modulation, 30 Hz to 20 GHz
MIL-STD-461E, CS105	Conducted Susceptibility, Antenna Port, Cross-Modulation, 30 Hz to 20 GHz
MIL-STD-461F, CS105	Conducted Susceptibility, Antenna Port, Cross-Modulation, 30 Hz to 20 GHz
MIL-STD-461F, CS106	Conducted Susceptibility, Transients, Power Leads

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#### NVLAP LAB CODE 200422-0

MIL-STD-461G, CS109	Conducted Susceptibility, Structure Current, 60 Hz to 100 kHz
MIL-STD-461E, CS109	Conducted Susceptibility, Structure Current, 60 Hz to 100 kHz
MIL-STD-461F, CS109	Conducted Susceptibility, Structure Current, 60 Hz to 100 kHz
MIL-STD-461G, CS114	Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 200 MHz
MIL-STD-461E, CS114	Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 200 MHz
MIL-STD-461F, CS114	Conducted Susceptibility, Bulk Cable Injection, 10 kHz to 200 MHz
MIL-STD-461G, CS115	Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation
MIL-STD-461E, CS115	Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation
MIL-STD-461F, CS115	Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation
MIL-STD-461G, CS116	Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz
MIL-STD-461E, CS116	Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz
MIL-STD-461F, CS116	Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads, 10 kHz to 100 MHz
MIL-STD-461G, CS117	Conducted Susceptibility, Lightning Induced Transients, Cables and Power Leads
MIL-STD-461G, CS118	Personnel Borne Electrostatic Discharge (ESD)
MIL-STD-462, CS01	Conducted Susceptibility, Power Leads, 30 Hz to 50 kHz
MIL-STD-462C, 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-462C, CS02	Conducted Susceptibility, Power and Interconnecting Control Leads, 0.05 to 400 MHz
MIL-STD-462 Method CS03/CS04/ CS05	Conducted Susceptibility, Intermodulation, Cross-modulation
MIL-STD-462C, CS03	Intermodulation, 15 kHz to 10 GHz
MIL-STD-462C, CS04	Rejection of Undesired Signals, 30 Hz to 20 GHz
MIL-STD-462C, CS05	Cross-modulation, 30 Hz to 20 GHz
MIL-STD-462, CS06	Conducted Susceptibility, Spikes, Power Leads

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MIL-STD-462C, CS06	Conducted Susceptibility, Spikes, Power Leads
MIL-STD-462, CS07	Conducted Susceptibility, Squelch Circuits
MIL-STD-462, CS09	Conducted Susceptibility, Structure (Common Mode) Current, 60 Hz to 100 kHz
MIL-STD-462C, CS09	Conducted Susceptibility, Structure (Common Mode) Current, 60 Hz to 100 kHz
MIL-STD-462, CS10	Conducted Susceptibility, Damped Sinusoidal Transients, Pins and Terminals, 10 kHz to 100 MHz
MIL-STD-462C, 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-462C, 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-462C, CS14	MIL-STD-462 Version C Method CS14
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, CS109	Conducted Susceptibility, Structure Current, 60 HZ to 100 kHz
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: Radiated Emissions**

<u>Designation</u>	<b>Description</b>
MIL-STD-461G, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461E, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461F, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz

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#### NVLAP LAB CODE 200422-0

MIL-STD-461G, RE102	Radiated Emissions, Electric Field, 10 kHz to 18 GHz
MIL-STD-461E, RE102	Radiated Emissions, Electric Field, 10 kHz to 18 GHz
MIL-STD-461F, RE102	Radiated Emissions, Electric Field, 10 kHz to 18 GHz
MIL-STD-461G, RE103	Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10 kHz to 40 GHz
MIL-STD-461E, RE103	Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10 kHz to 40 GHz
MIL-STD-461F, RE103	Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10 kHz to 40 GHz
MIL-STD-462, RE01	Radiated Emissions, Magnetic Field, 0.03 to 50 kHz
MIL-STD-462C, 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-462C, RE02	Radiated Emissions, Electric Field, 14 kHz to 10 GHz
MIL-STD-462, RE03	Radiated Emissions, Spurious and Harmonics, Radiated Technique
MIL-STD-462C, 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: Radiated Susceptibility**

<b>Designation</b>	<u>Description</u>
MIL-STD-461G, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461E, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461F, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-461G, RS103	Radiated Susceptibility, Electric Field, 2 MHz to 40 GHz
MIL-STD-461E, RS103	Radiated Susceptibility, Electric Field, 2 MHz to 40 GHz
MIL-STD-461F, RS103	Radiated Susceptibility, Electric Field, 2 MHz to 40 GHz
MIL-STD-461G, RS105	Radiated Susceptibility, Transient Electromagnetic Field
MIL-STD-461E, RS105	Radiated Susceptibility, Transient Electromagnetic Field

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#### NVLAP LAB CODE 200422-0

MIL-STD-461F, RS105	Radiated Susceptibility, Transient Electromagnetic Field
MIL-STD-462, RS01	Radiated Susceptibility, Magnetic Field, 0.03 to 50 kHz
MIL-STD-462C, 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-462C, 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-462C, RS03	Radiated Susceptibility, Electric Field, 14 kHz to 40 GHz
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