

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Dayton T. Brown, Inc.

1195 Church Street Bohemia, NY 11716 Ms. Mary Alice Der Aris

Phone: 631-244-6315 Fax: 631-589-4046 Email: mderaris@dtb.com

http://www.dtb.com

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

Emissions

Designation EN 55011:2016/A2:2021	<u>Description</u> Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement (CISPR 11:2015, modified)
EN 55022 (2010) + AC (2011)	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 55032:2015+A1:2020	Electromagnetic compatibility of multimedia equipment - Emission Requirements (CISPR 32:2015)
IEC/CISPR 11 ED. 7.0 (2024-02)	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement
IEC/CISPR 22 Ed. 6.0 (2008-09)	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
CISPR 32, Ed. 2.1 (2015) + A1 (2019)	Electromagnetic compatibility of multimedia equipment - Emission requirements
RTCA/DO-160B (1984)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emission of Radio Frequency Energy
RTCA/DO-160A (1980)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emission of Radio Frequency Energy

For the National Voluntary Laboratory Accreditation Program



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

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-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 21: Emissions of Radio Frequency Energy
RTCA/DO-160G (2010)	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

Immunity	
<u>Designation</u>	<u>Description</u>
IEC 61000-4-2, Ed. 2.0 (2008-12)	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test
EN 61000-4-2 (2009-05)	Electromagnetic compatibility (EMC) - Part 4-2 : Testing and measurement techniques - Electrostatic discharge immunity test
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
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 16: Power Input



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

RTCA/DO-160G (2010)	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-160E (2004)	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 17: Voltage Spikes
RTCA/DO-160B (1984)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility - Power Inputs
RTCA/DO-160A (1980)	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 18: Audio Frequency Conducted Susceptibility - Power Inputs
RTCA/DO-160D (1997)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility - Power Inputs
RTCA/DO-160F (2007)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Suspceptibility - Power Inputs
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Susceptibility
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 18: Audio Frequency Conducted Suspectibility - Power Inputs
RTCA/DO-160F (2007)	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 19: Induced Signal Susceptibility
RTCA/DO-160G (2010)	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 20.4: RF Susceptibility, Conducted
RTCA/DO-160E (2004)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 20.4: RF Susceptibility, Conducted
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



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

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
RTCA/DO-160F (2007)	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 25: Electrostatic Discharge (ESD)
RTCA/DO-160G (2010)	Environmental Conditions and Test Procedures for Airborne Equipment - Section 25: Electrostatic Discharge (ESD)

MIL-STD	
Designation MIL-STD-1275E (2006)	<u>Description</u> Characteristics of 28 Volt DC Input Power to Utilization Equipment in Military Vehicles
MIL-STD-1275C	Characteristics of 28 Volt DC Electrical Systems in Military Vehicle
MIL-STD-1275D	Characteristics of 28 Volt DC Electrical Systems in Military Vehicles (Sections 5.3.2.2, 5.3.2.3, 5.3.2.4, 5.3.2.5)
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-1275B (November 20, 1997)	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-1399-300-1	Interface Standard for Shipboard Systems: Low Voltage Electric Power, Alternating Current
MIL-STD 1399 Section 300A	Interface standard for Shipboard Systems: Electric Power, Alternating Current



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

MIL-STD-1399 Section 300B	Interface Standard for Shipboard Systems: Electric Power, Alternating Current
MIL-STD-202G, Method 301	Dieletric Withstanding Voltage
MIL-STD-202G, Method 302	Insulation Resistance
MIL-STD-202G, Method 307	Contact Resistance
MIL-STD-202G, Method 310	Contact Chatter Monitoring
MIL-STD-704, (1959)	Aircraft Electrical Power Characteristics
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 59-411 Part 3 (2019)	Electromagnetic Compatibility Part 3: Test Methods and Limits for Equipment and Sub Systems
DEF-STAN 61-5 Part 6 (2009)	Nominal 12 V and 24 V DC Electrical Systems in Military Platforms
DEF-STAN 59-41 Part 3, DCE01 (1995-10)	Conducted Emission on Primary Power Lines
DEF-STAN 59-41 Part 3, DCE03 (1995-10)	Exported Transients Power Lines
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



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

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, 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, DMFS01 (1995-10)	Magnetostatic Field Susceptibility
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
DEF-STAN 59-41 Part 3, DRS02 (1995-10)	E Field Susceptibility

MIL-STD: Conducted Emissions

Designation	<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



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

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-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
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



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

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-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>	<u>Description</u>
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



ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200422-0

MIL-STD-461F, RE101	Radiated Emissions, Magnetic Field, 30 Hz to 100 kHz
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-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

<u>Designation</u>	Description
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-462D, RS101	Radiated Susceptibility, Magnetic Field, 30 Hz to 100 kHz
MIL-STD-462D, RS103	Radiated Susceptibility, Electric Field, 10 kHz to 40 GHz

Accredited Test Methods in Support of FCC Approval Procedures

Designation Description

ANSI C63.4 (2014) Unintentional Radiators in 47 CFR FCC Part 15, Subpart B

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200422-0

Dayton T. Brown, Inc.

Bohemia, NY

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique on ISO/IEC 17025).

2024-12-23 through 2025-12-31

Effective Dates



For the National Voluntary Laboratory Accreditation Program