United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200974-0

Shielding Integrity Services

Colorado Springs, CO

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 dated January 2009).

2023-02-23 through 2024-03-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Shielding Integrity Services
4750 North Chestnut Street
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ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200974-0

Emissions

Designation	***Description***
ETSI TR 102 273-2 V1.2.1 (2001-12)	Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 2: Anechoic chamber
ETSI TR 102 273-3 v1.2.1 (2001-12),Parts 6.4.1-6.4.3 only	(ERM) - Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties. Part 3: Anechoic chamber with a ground plane. *Section 6.4.1 - 30 MHz - 1000 MHz* *Section 6.4.2 - Alternative procedure: 30 MHz to 1000 MHz* *Section 6.4.3 - 1 GHz to 12.75 GHz*
EN 50147-1 (1997)	Anechoic chambers. Shield attenuation measurement
EN 50147-2 (1997)	Anechoic chambers. Alternative test site suitability with respect to site attenuation
ANSI C63.4a (2017)	American National Standard for Methods of Measurement of Radio- Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz--Amendment 1: Test Site Validation *NSA Only (30MHz – 1GHz)*
ANSI C63.4 (2014)	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment - NSA Only (30MHz - 1GHz)

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ANSI C63.4 (2009)	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electrical Equipment - NSA only (30 MHz to 1GHz)
CISPR 16-1-4, Ed. 4.1 (2020-06)	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements *Sections 6 and 7*
CISPR 16-1-4 (2010) + A1 (2012) + A2 (2017), Clause 5	Normalized Site Attenuation (NSA) - 30 MHz - 1 GHz: Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements
CISPR 16-1-4 (2010) + A1 (2012) + A2 (2017), Clause 8	Site VSWR (SVSWR) - 1GHz - 18 GHz: Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements
CISPR 16-1-4 (2010) + A1 (2012), Clauses 8.3.3 through 8.4	Site VSWR (SVSWR) - 1GHz - 18 GHz: Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements
CISPR 16-1-4 (2019)	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements *Sections 6 and 7*
CISPR 16-1-4 (2010), Clauses 5.2.6 - 5.4.3	Normalized Site Attenuation (NSA) - 30 MHz - 1 GHz: radio disturbance and immunity measurement apparatus and methods
CISPR 16-1-4 (2010), Clause 5.5.2	Set-up Table Influences - Radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements
IEC CISPR 25, Ed. 5.0 (2021-12)	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receiver - Annex I (Informative) ALSE performance validation 150 kHz to 1 GHz
IEC/CISPR 25 (2016)	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receiver - Annex J - ALSE performance validation 150 kHz to 1 GHz
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. NSA only. (70 MHz to 1GHz)
IEEE Std 149 (2021)	IEEE Recommended Practice for Antenna Measurements
IEEE Std 149-1979 (R2008)	VSWR/Free Space - 30 MHz to 100 GHz: Test Procedure for Antennas
IEEE Std 299 (2006)	Measuring the Effectiveness of Electromagnetic Shielding Enclosures

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NSA NO. 94-106 (1994-10)	Radio Frequency (RF) for Shielded Enclosures

Immunity

Designation	***Description***
IEC 61000-4-3, Ed. 4.0	Field of Uniformity (FoU) - 26 MHz to 18 GHz
IEC 61000-4-3, Ed. 4.0 (2020-09)	Electromagnetic compatibility (EMC) - Part 4-3: Testing measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-3, Ed. 3.2	Field of Uniformity (FoU) - 26 MHz to 18 GHz
IEC 61000-4-21 (2011)	Electromagnetic compatibility (EMC) - Part 4-21: Testing and measurement techniques - Reverberation chamber test methods
IEC 61000-4-21, 1st Edition (2003-08)	EMC-Part 4-21: Testing and measurement techniques Reverberation chamber test methods

MIL-STD

Designation	***Description***
MIL-STD-188-125-1 Appendix A	Shielding Effectiveness (SE) Test Procedures for Fixed Facilities

MIL-STD: Radiated Emissions

Designation	***Description***
MIL-STD-188-125-2 Appendix A	Shielding Effectiveness (SE) Test Procedures for Transportable Ground-based Systems

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