TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Legal Name of Accredited Laboratory:	**INVESTISSEMENT QUÉBEC**
Location Name or Operating as (if applicable):	Investissement Québec - CRIQ
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To ensure compliance with the *Official Languages Act*, the Standards Council of Canada (SCC) translated proprietary content from English to French when it was not available in French. In case of discrepancies between the English and French versions, In case of discrepancies between the English and French versions, the original version of the method prevails.

SCC File Number:	15206
Accreditation Standard(s):	ISO/IEC 17025:2017 – General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Acoustics and Vibration Electrical/Electronic Mechanical/Physical Thermal Resistance
Initial Accreditation:	1993-12-07
Most Recent Accreditation:	2023-08-11
Accreditation Valid to:	2025-12-07

Canada

ELECTRICAL PRODUCTS AND ELECTRONIC PRODUCTS

(Electromagnetic Compatibility and Interference (EMC and EMI))

CISPR 32 AS/NZS CISPR 32 EN55032 KN 32	Electromagnetic compatibility of multimedia equipment. Emission Requirements Excluding clauses C3.7, C3.8, C4.2 et C4.3 See Note 1
47CFR15 Subpart B	Code of Federal Regulations. Federal Communications Commission. Radio Frequency Devices. Unintentional Radiators See Note 1
ANSI C63.10	Procedures for compliance testing of unlicensed wireless devices See Note 1 Only for clauses 6.2, 6.3, 6.4, 6.5 and 6.6 and up to 40 GHz
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz See Note 1
CAN/CSA CISPR 12-10	Limits and methods of measurements of Radio disturbance characteristics for the protection of off-board receivers of Vehicles, Boats and Internal combustion engines
CISPR 11 EN55011	Industrial, scientific and medical (ISM) radio-frequency equipment - Radio disturbance characteristics - Limits and methods of measurement See Note 1
CISPR 12	Vehicle, boats, and internal combustion engine driven devices - Radio disturbance characteristics - Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/devices
CISPR 15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment See Note 1
CISPR 24 EN 55024	Information technology equipment - Immunity characteristics - Limits and methods of measurement
EN 60601-1-2	Medical electrical equipment - Part 1-2 : General requirements for safety - Collateral standard : Electromagnetic compatibility - Requirements and tests.
EN 61000-3-2	Electromagnetic compatibility (EMC) - Limits - Limits for harmonic current emissions (equipment input current up to and including 16 A per phase)

EN 61000-3-3	Electromagnetic compatibility (EMC) - Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <16 A per phase and not subject to conditional connection
EN 61000-4-11 IEC 61000-4-11 KN 61000-4-11	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests
EN 61000-4-2 IEC 61000-4-2 KN 61000-4-2	Electromagnetic compatibility (EMC)- Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test
EN 61000-4-3 IEC 61000-4-3 KN 61000-4-3	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-4-4 IEC 61000-4-4 KN 61000-4-4	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
EN 61000-4-5 IEC 61000-4-5 KN 61000-4-5	Electromagnetic Compatibility (EMC) - Part 4-5: Testing and Measurement Techniques - Surge Immunity Test
EN 61000-4-6 IEC 61000-4-6 KN 61000-4-6	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
EN 61000-4-8 IEC 61000-4-8 KN 61000-4-8	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test
EN 61000-4-9 IEC 61000-4-9 KN 61000-4-9	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques - Pulse magnetic field immunity test
EN 61547 IEC 61547	Equipment for general lighting purposes - EMC immunity requirements
EN 62493 IEC 62493	Assessment of lighting equipment related to human exposure to electromagnetic fields
EN 50130-4	Alarm systems - Part 4 : Electromagnetic compatibility - Product family standard : Immunity requirements for components of fire, intruder and social alarm
EN 61326-1	Electrical equipment for measurement, control and laboratory use - EMC requirements
ICES-003	Industry Canada. Spectrum Management and Telecommunication Policy. Interference-Causing Equipment Standard. Digital Apparatus See Note 1
ICES-005	Industry Canada. Spectrum Management and Telecommunication Policy. Radio Frequency Lighting Devices (RFLD) See Note 1

IEEE C37.90	IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus. Only section 8.
Sn-62.1008	Hydro-Québec. Standard specification. Electronic and Relay Equipment Supplying and testing
UNECE Regulation 10	Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility

(Environmental Testing)

EN 50155	Railway applications - Electronic equipment used on rolling stock (Except for 13.4.13 Salt mist test)
EN 60529	Degrees of protection provided by enclosures (IP code) (Except for IPX9)
EN 62262	Degrees of protection provided by enclosures; for electrical equipment against external; mechanical impacts (IK code)
IEC 60068-2-1	Environmental testing - Part 2-1: Tests - Test A : Cold
IEC 60068-2-14	Environmental testing - Part 2-14: Tests - Test N : Change of temperature tests
IEC 60068-2-18	Environmental testing - Part 2-18: Tests- Test R and guidance: Water Except for: 5.2, 6.2.2, 7.3
IEC 60068-2-2	Environmental testing - Part 2-2: Tests - Tests B : Dry heat
IEC 60068-2-27	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock
IEC 60068-2-30	Environmental testing - Part 2-30: Test - Test Db and guidance : Damp heat, cyclic (12 + 12 hour cycle)
IEC 60068-2-31	Environmental testing - Part 2-31: Tests - Test Ec : Drop and topple, primarily for equipment-type specimens
IEC 60068-2-55	Environmental testing - Part 2-55: Tests - Test Ee and guidance : Bounce
IEC 60068-2-6	Environmental testing - Part 2-6: Tests - Test Fc : Vibration (sinusoidal)
IEC 60068-2-64	Environment Testing - Part 2-64: Test Methods - Test Fn: Vibration, Broad-Band Random (Digital Control) and Guidance
IEC 60068-2-75	Environment Testing Part 2-75: Tests □ Test Eh: Hammer tests
IEC 60068-2-78	Environmental testing - Part 2-78: Tests - test CAB: damp heat, steady state
IEC 61373	Railway Applications - Rolling Stock Equipment - Shock and Vibration tests

MIL-STD-810	Environmental Engineering Considerations and Laboratory Tests Only for: Methods 500 Low Pressure (Altitude) (Except for Rapid Decompression, procedure III and Explosive Decompression, procedure IV) 501 High Temperature 502 Low Temperature 503 Temperature Shock 506 Rain (Except for Rain and Blowing rain, procedure I) 507 Humidity 512 Immersion 514 Vibration (Except for Loose cargo transportation, procedure II) 516 Shock 521 Icing/Freezing Rain
NEMA 250	Enclosure for electrical equipment (1000 Volts Maximum) Only for: • 5.3 Method B only • 5.4 • 5.5.1 Hose Method • 5.5.2 Atomised water, Method A and Method B • 5.6 • 5.7 • 5.11

(Micro-Electrical Testing)

IEC 60255-21-1	Electrical relays Part 21 : Vibration, shock, bump and seismic tests on measuring relays and protection equipment Section 1: Vibration tests (sinusoidal)
IEC 60255-21-2	Electrical relays Part 21 : Vibration, shock, bump and seismic tests on measuring relays and protection equipment Section 2 - shock and bump tests
IEC 60571	Railway Applications - Electronic equipment used on rolling stock (Except subclause 12.2.11 – Salt mist test)

MACHINERY

(Aerospace)

RTCA/DO – 160G	Environmental Conditions and Test Procedures for Airborne Equipment Only for: sections 4 (except 4.6.3), 5, 6, 7 (except 7.3.3), 8, 10, 14, 15, 24 (only for cat. A and C) and 25

(Equipment, Miscellaneous)

*ASTM E4	Standard Practices for Force Verification of Testing Machines
ASTM D999	Standard Method for Vibration Testing of Shipping Containers Except for: Method A2

MARKETPLACE PRODUCTS-CONSUMER AND BUSINESS

Furniture and Consumer Articles:

Sports Equipment

9415-370 CAN/BNQ	Neck Protectors for Ice Hockey and Ringuette Players Only for: Sections 7.2, 7.3, 8.1 and 8.2

Other (specify):

Number of Scope Listings: 54

Notes:

CISPR: Comité international spécial des perturbations radioélectriques

IEC: International Electrotechnical Commission

ANSI: American National Standards Institute

EN: European Standard (Norm)

UNECE: United Nations Economic Commission for Europe

MIL-STD: Military Standard (USA)

NEMA: National Electrical Manufacturer's Association (USA)

CSA: Canadian Standards Association

RTCA: Radio Technical Commission for Aeronautics

ASTM: ASTM International, formerly American Society for Testing and Materials

BNQ: Bureau de normalisation du Québec

ICES: Interference-Causing Equipment Standard (Canada)

Note 1: Testing distance of 3 m and up to 40 GHz

* These test methods can be performed on-site as per RG-On-Site-Testing.

This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

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