



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HERMON LABORATORIES
66 Hatachana Street
(Postal Mail to P.O. Box 23)
Binyamina, 3055001, ISRAEL
Mr. George Shleimovich Phone: 972 4 6288 001
Email: mail@hermonlabs.com

MECHANICAL

Valid to: May 31, 2025

Certificate Number: 0839.04

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following environmental tests on radio, telecom, and medical devices:

Test Technology:

Telecommunication Equipment

Environmental Conditions and Environmental
Tests for Telecommunications Equipment

Test Method(s)¹:

ETSI EN 300 019-2-0 V2.1.2 (2003-09);
ETSI EN 300 019-2-0;
ETSI EN 300 019-2-1 V2.1.2 (2000-09);
ETSI EN 300 019-2-1 V2.2.1 (2014-10);
ETSI EN 300 019-2-1;
ETSI EN 300 019-2-2 V2.1.2 (1999-09);
ETSI EN 300 019-2-2 V2.3.1 (2013-04);
ETSI EN 300 019-2-2;
ETSI EN 300 019-2-3 V2.2.2 (2003-04);
ETSI EN 300 019-2-3 V2.4.1 (2015-12);
ETSI EN 300 019-2-3;
ETSI EN 300 019-2-4 V2.2.2 (2003-04);
ETSI EN 300 019-2-4 V2.4.1 (2015-12);
ETSI EN 300 019-2-4;
ETSI EN 300 019-2-5 V3.0.0 (2002-12);
ETSI EN 300 019-2-5;
ETSI EN 300 019-2-6 V3.0.0 (2002-12);
ETSI EN 300 019-2-7 V3.0.1 (2003-04);
ETSI EN 300 019-2-8 V2.1.2 (1999-09);
ETSI EN 300 019-2-8

Generic Standards

Guidance for the Correlation and Transformation of
Environmental Condition Classes of IEC 60721-3
to the Environmental Tests of IEC 60068
Basic Requirements: Atmospheric Conditioning,
Compression, Fixed Displacement or Random
Vibration and shock testing

IEC 60721-4-1; IEC 60721-4-2; IEC 60721-4-3;
IEC 60721-4-4; IEC 60721-4-5; IEC 60721-4-7;
IEC 60721-4-3:2001+A1:03
ISTA 2A

Test Technology:***Generic Standards (Cont.)***

Packaged-Products for Parcel Delivery System
Shipment 70 kg (150 lb) or Less
Alarm systems - Part 5: Environmental test methods

Operating conditions – Section 2: Environmental conditions (climatic, mechanical and other non-electrical influences)

Altitude & Pressure

Network Equipment - Building System (NEBS) requirements: Physical Protection, Clause 5.1.3 – Operating Altitude

Environmental Testing - Part 2: Tests - Test M: Low Air Pressure

Environmental Engineering

Considerations and Laboratory Tests:

Method 500 Procedure I/II

Method 504 Procedure I

Method 518.1 Procedure I

Method 500.1 Procedure I/II

Method 504.1 Procedure I

Method 518.1 Procedure I

Method 500.2 Procedure I/II/III

Method 520.0 Procedure III

Method 500.3 Procedure I/II/III

Method 520.1 Procedure III

Method 500.4 Procedure I/II/III

Method 520.2 Procedure III

Method 500.5 Procedure I/II/III

Method 520.3 Procedure III

Method 500.6 Procedure I/II/III

Method 520.4 Procedure III

Methods 500.6 Procedure I/II/III

Method 520.5 Procedure III

Methods 500.6 Procedure I/II/III

Method 520.5 Procedure III

Section 4.0 Temperature and Altitude test

Environmental Handbook for Defense Material;
Section 3: Chapters: CL9, CL11, CL12, CL13, CL15, CL20

Environmental Handbook for Defense Material;
Section 3: Chapters: CL9, CL11, CL12, CL13, CL15, CL20

Test Method(s)¹:

ISTA 3A

EN 50130-5:98;

EN 50130-5:11

IEC 60870-2-2

GR-63-CORE:06

IEC 60068-2-13:83;

IEC 60068-2-13

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95

MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93;
RTCA/DO-160D:97 + CHG1:00 + CHG2:01 +
CHG3:02;

RTCA/DO-160E:04; RTCA/DO-160F:07;

RTCA/DO-160G:10 + CHG1:14

DEF STAN 00-35, Part 3, Issue 4:06

DEF STAN 00-035, Part 3, Issue 5:17

Test Technology:***Altitude & Pressure (Cont.)***

IEEE Standard Environmental and Testing Requirements for Communications Networking Devices Installed in Electric Power Substations. Section 3.3: Altitude

Communication Networks and Systems in Substations - Part 3: General Requirements.

Clause: 5.4 Barometric Pressure

Medical Electrical Equipment

Selected clauses (4.2.2c, 4.2.2d)

Medical Electrical Equipment

Selected clauses (4.2.3.1d, 4.2.3.1e)

Standard Test Methods for Determining the Effects of High Altitude on Packaging Systems by Vacuum Method

Railway applications — Electronic equipment used on rolling stock (Clause 4.3.1 / 4.4.1)

Temperature and Humidity

Environmental Testing - Part 2: Tests - Test A: Cold

Environmental Testing - Part 2: Tests - Test B: Dry Heat

Environmental Testing - Part 2: Tests - Test N: Change of Temperature

Environmental Testing - Part 2-30: Tests - Test Db: Damp Heat, Cyclic (12 h + 12 h cycle)

Environmental Testing - Part 2: Tests - Test Z/AD: Composite Temperature/Humidity Cyclic Test

Environmental Testing Part 2: Tests - Test Cb: Damp Heat, Steady State, Primarily for Equipment

Environmental Testing - Part 2-78: Tests - Test 2-78: Body Cab: Damp Heat, Steady State

Adjustable speed electrical power drive systems; Part 5-1: Safety requirements – Electrical, thermal and energy (Clause 5.2.6.3)

Network Equipment – Building

System (NEBS) Requirements: Physical Protection Clause 5.1.1.1/2/3;

Clause 5.1.2

Environmental Engineering Considerations and Laboratory Tests:

Method 501, Procedure I/II

Method 502, Procedure I

Method 503, Procedure I

Method 507, Procedures I/II/III/IV/V

Test Method(s)¹:

IEEE Std 1613; IEEE Std 1613a; IEEE Std 1613.1;

IEC 61850-3

IEC 60601-1-11:10

IEC 60601-1-11

ASTM D6653/D6653M – 01(R2010);

ASTM D6653/D6653M-13;

ASTM D6653/D6653M

EN 50155:17; EN 50155:21

IEC 60068-2-1:90 + A2:94;

IEC 60068-2-1

IEC 60068-2-2:74 + A1:93 + A2:94;

IEC 60068-2-2

IEC 60068-2-14:84 + A1:86;

IEC 60068-2-14:09; IEC 60068-2-14;

IEC 60068-2-30:80 + A1:85;

IEC 60068-2-30

IEC 60068-2-38:74;

IEC 60068-2-38:09;

IEC 60068-2-38

IEC 60068-2-56:88

IEC 60068-2-78:01;

IEC 60068-2-78

IEC/EN 61800-5-1

GR-63-CORE:06

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 + Notice 3:70 + Notice 4:70

Test Technology:Environmental Engineering Considerations
and Laboratory Tests (Cont.):

Method 501.1, Procedure I/II

Method 502.1, Procedure I

Method 503.1, Procedure I

Method 507.1, Procedures I/II/III/IV/V

Method 501.2, Procedure I/II

Method 502.2, Procedure I/II/III

Method 503.2, Procedure I

Method 507.2, Procedures I/II/III

Method 501.3, Procedure I/II

Method 502.3, Procedure I/II/III

Method 503.3, Procedure I

Method 507.3, Procedures I/II/III

Method 501.4, Procedure I/II

Method 502.4, Procedure I/II/III

Method 503.4, Procedure I/II

Method 507.4, Procedure I

Method 501.5, Procedure I/II

Method 502.5, Procedure I/II/III

Method 503.5, Procedure I

Method 507.5, Procedure I/II

Method 501.6, Procedure I/II

Method 502.6, Procedure I/II/III

Method 503.6, Procedure I

Method 507.6, Procedure I/II

Method 501.7, Procedure I/II

Method 502.7, Procedure I/II/III

Method 503.7 Procedure I

Method 507.6 Procedure I/II

Method 501.7, Procedure I/II

Method 502.7, Procedure I/II/III

Method 503.7 Procedure I

Method 507.6 Procedure I/II

Section 5.0 Temperature Variation Test

Section 6.0 Humidity Test

Conditioning Atmosphere

Accelerated Aging of Sterile Barrier Systems for
Medical DevicesStandard Practice for Climatic Stressing of
Packaging Systems for Single Parcel Delivery**Test Method(s)¹:**

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93

RTCA/DO-160D: 97 + CHG1:00 + CHG2:01+
CHG3:02;

RTCA/DO-160E:04; RTCA/DO-160F:07;

RTCA/DO-160G:10 + CHG1:14

ASTM D4332-01;

ASTM D4332-01(2006);

ASTM D4332-14;

ASTM D4332

ASTM F1980-07(R2011);

ASTM F1980-16;

ASTM F1980

ASTM F2825



Test Technology:

Environmental Engineering Considerations
and Laboratory Tests:

Specification for Environmental Testing of
Switching and Transmission Equipment at India

Paragraph 8.0, Category A, B, C, D, Humidity

Paragraph 10.0, Category A, B, C, D, Humidity

Paragraph 6.0, Category A, B, C, D, Low
Temperature

Paragraph 7.0, Category A, B, C, D, High
Temperature

Paragraph 9.0, Category A, B, C, D, Thermal
Shock

Environmental Handbook for Defense Material;
Section 3: Chapters: CL1, CL2, CL4, CL5, CL7,
CL14, CL21

Environmental Handbook for Defense Material;
Section 3: Chapters: CL1, CL2, CL4, CL5, CL6,
CL7, CL14, CL21

IEEE Standard Environmental and Testing
Requirements for Communications Networking
Devices Installed in Electric Power Substations.

Section: 3.1: Usual service conditions

Communication Networks and Systems in
Substations - Part 3: General Requirements.

Clauses: 5.2 Temperature

5.3 Humidity

Communication networks and systems for power
utility automation –

Part 3: General requirements.

Clauses:

6.9.3.1 Dry heat operational

6.9.3.2 Cold operational

6.9.3.3 Dry heat storage

6.9.3.4 Cold storage

6.9.3.5 Change of temperature

6.9.3.6 Damp heat steady state

6.9.3.7 Damp heat cyclic

Needle-based Injection Systems for Medical
use - Requirements and Test Methods - Part 1:
Needle-based Injection Systems.

Sections:

10.2 Cool, standard and warm atmosphere testing

10.6 Dry-heat and cold-storage testing

10.7 Damp-heat testing

10.8 Cyclical testing

Test Method(s)¹:

QM-333

DEF STAN 00-35 Part 3, Issue 4:06

DEF STAN 00-035, Part 3, Issue 5:17

IEEE Std 1613; IEEE Std 1613a; IEEE Std 1613.1

IEC 61850-3:02

IEC 61850-3

ISO 11608-1:15

Test Technology:

Needle-based Injection Systems for Medical use - Requirements and Test Methods - Part 1: Needle-based Injection Systems.

Sections:

10.2.1 Cool, standard and warm atmosphere in-use testing

10.3.2 Dry-heat storage – Preconditioning

10.3.3 Cold-storage – Preconditioning

10.3.4 Damp-heat testing – Preconditioning

10.3.5 Cyclical testing – Preconditioning

Pen-injectors for medical use - Part 4: Requirements and Test Methods for electronic and electromechanical pen-injectors.

Sections:

6.1 Standard atmosphere

6.2 Cool atmosphere

6.3 Hot atmosphere

7.1 Preconditioning in dry heat atmosphere

7.2 Preconditioning in cold storage atmosphere

7.3 Preconditioning in cyclical atmosphere

7.9 Preconditioning for damp heat

Medical Electrical Equipment

Selected clauses (4.2.1, 4.2.2, 4.2.3)

Medical Electrical Equipment

Selected clauses (4.2.1, 4.2.2, 4.2.3.1, and 4.2.3.2)

Railway applications — Electronic equipment used on rolling stock (Clauses 4.3.2, 4.3.3, 4.3.4, 4.3.7, 13.4.4, 13.4.5, 13.4.6, 13.4.7, 13.4.14 / 4.4.2, 4.4.3, 4.4.4, 4.4.7, 13.4.4, 13.4.5, 13.4.6, 13.4.8, 13.4.12)

Mechanical Shock

Environmental Testing - Part 2:

Tests - Test Ea and Guidance: Shock

Environmental Testing - Part 2:

Tests - Test Eb and Guidance: Bump

Environmental testing - Part 2:

Tests - Test Eh:

Hammer Tests

Railway Applications –

Rolling Stock Equipment -

Shock and Vibration Tests

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems (Clause 7.3.8)

Environmental Engineering Considerations and Laboratory Tests:

Test Method(s)¹:

ISO 11608-1

ISO 11608-4

IEC 60601-1-11:10

IEC 60601-1-11

EN 50155:17; EN 50155:21

IEC 60068-2-27:87;
IEC 60068-2-27

IEC 60068-2-29:87

IEC 60068-2-75:97;
IEC 60068-2-75

EN/IEC 61373

IEC/EN 62133-2

Test Technology:

Method 516 Procedure I/III/IV

Method 516.2 Procedure I/III/IV
Method 516.3 Procedure I/II/V
Method 516.4 Procedure I/II/V

Method 516.5 Procedure I/II/V

Method 516.6 Procedure I/II/V
Method 516.7, Procedure I/II/V
Method 516.8, Procedure I/II/V
Method 516.8, Procedure I/II/V

Section 7.0 Operational Shock and Crash Safety Test

Environmental Handbook for Defense Material;
Section 2: Chapters: M3, M12

Environmental Handbook for Defense Material;
Section 2: Chapters: M3, M12

IEEE Standard Environmental and Testing Requirements for Communications Networking Devices Installed in Electric Power Substations. Section: 9 Vibration and shock

Communication networks and systems for power utility automation –
Part 3: General requirements.
Clause: 6.10.2 Shock response, shock withstand and bump

Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment Section Two - Shock and bump tests
Section: 4 Requirements for shock and bump tests

Pen-injectors for Medical use - Part 4: Requirements and Test Methods for Electronic and Electromechanical Pen-injectors.
Section: 7.6 Preconditioning by shock

Needle-based injection systems for medical use — Requirements and test methods —
Part 4: Needle-based injection systems containing electronics; Section: 10.2 Shock

Medical electrical equipment
Selected clauses (10.1.2a, 10.1.3a, 10.1.3b)

Railway applications — Electronic equipment used on rolling stock (Clauses 4.3.5, 13.4.11 / 4.4.5, 13.4.10)

Test Method(s)¹:

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 + Notice 3:70 + Notice 4:70

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 + Notice 3:95

MIL-STD 810F: 00 + Notice 1:00 + Notice 2:02 + Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93;
RTCA/DO-160D:97+CHG1:00+CHG2:01+CHG3:02;
RTCA/DO-160E:04;
RTCA/DO-160F:07;
RTCA/DO-160G:10 + CHG1:14

DEF STAN 00-35 Part 3, Issue 4:06

DEF STAN 00-035, Part 3, Issue 5:17

IEEE Std 1613; IEEE Std 1613a; IEEE Std 1613.1;

IEC 61850-3

IEC 60255-21-2

ISO 11608-4:06

ISO 11608-4

IEC 60601-1-11:10;
IEC 60601-1-11
EN 50155:17; EN 50155:21

Test Technology:***Vibration Testing***

Environmental Testing - Part 2: Tests - Test Fc:
Vibration (Sinusoidal)
Basic Environmental Testing Procedures
Part 2: Tests - Test Ee and Guidance: Bounce
Environmental Testing - Part 2: Tests - Test Fh:
Vibration, Broad-band Random
(Digital Control) and Guidance
Railway Applications –
Rolling Stock Equipment -
Shock and Vibration Tests
Secondary cells and batteries containing alkaline or
other non-acid electrolytes – Safety requirements
for portable sealed secondary cells, and for batteries
made from them, for use in portable applications –
Part 2: Lithium systems (Clause 7.3.8)
Adjustable speed electrical power drive systems;
Part 5-1: Safety requirements – Electrical, thermal
and energy (Clause 5.2.6.4)
Network Equipment - Building System (NEBS)
Requirements: Physical Protection
 Clause 5.4.2 - Office vibration
 Clause 5.4.3 - Transportation vibration
Specification for Environmental Testing of
Switching and Transmission Equipment at India
Paragraph 12.0, Category A, B, C, D, Sine
Vibration
Environmental Engineering Considerations and
Laboratory Tests:
Method 514 Random Vibration
Method 519.1, Gunfire Vibration
Method 514.2, Random Vibration
Method 519.2, Gunfire Vibration
Method 514.3, Random Vibration
Method 519.3, Gunfire Vibration
Method 514.4, Random Vibration
Method 519.4, Gunfire Vibration
Method 514.5, Random Vibration,
Method 519.5, Gunfire Vibration
Method 514.6, Random Vibration,
Method 519.6, Gunfire Vibration
Method 528, Mechanical Vibrations of Shipboard
Equipment
Method 514.7, Random Vibration,
Method 519.7, Gunfire Vibration
Method 528.1, Mechanical Vibrations of Shipboard
Equipment

Test Method(s)¹:

IEC 60068-2-6:95;
IEC 60068-2-6
IEC 60068-2-55:87;
IEC 60068-2-55
IEC 60068-2-64:93;
IEC 60068-2-64

EN/IEC 61373

IEC/EN 62133-2

IEC/EN 61800-5-1

GR-63-CORE:06

QM-333

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 +
 Notice 3:70 + Notice 4:70
MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
 Notice 3:95
MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
 Notice 3:03
MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

Test Technology:

Method 514.8, Random Vibration,
Method 519.8, Gunfire Vibration
Method 528.1, Mechanical Vibrations of Shipboard
Equipment
Method 514.8, Random Vibration,
Method 519.8, Gunfire Vibration
Method 528.1, Mechanical Vibrations of Shipboard
Equipment
Mechanical Vibrations of Shipboard Equipment
Section 8.0 Vibration Test

Performance Testing of Shipping
Containers and System

Vibration Testing

Environmental Handbook for Defense Material;
Section 2: Chapter: M1
Environmental Handbook for Defense Material;
Section 2: Chapter: M1
IEEE Standard Environmental and Testing
Requirements for Communications Networking
Devices Installed in Electric Power Substations.
Section: 9 Vibration and Shock
Communication networks and Systems in
Substations - Part 3: General Requirements
Section: 5.5 Mechanical and Seismic
Communication networks and systems for power
utility automation – Part 3: General requirements.
Clauses: 6.10.1 Vibration response and endurance
(sinusoidal) and 6.10.3 Seismic
Electrical relays - Part 21: Vibration, shock, bump
and seismic tests on measuring relays and protection
equipment Section One - Vibration tests (sinusoidal)
Section: 4 Requirements for vibration tests
(sinusoidal)

Test Method(s)¹:

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

MIL-STD 167 -1A:05
RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93
RTCA/DO-160D: 97 + CHG1:00 + CHG2:01 +
CHG3:02;
RTCA/DO-160E:04;
RTCA/DO-160F:07;
RTCA/DO-160G:10 + CHG1:14
ASTM D4169-99;
ASTM D4169-08;
ASTM D4169-09;
ASTM D4169-14;
ASTM D4169-16;
ASTM D4169
ASTM D999-01; ASTM D999
ASTM D4728-06(R2012);
ASTM D4728-17;
ASTM D4728
DEF STAN 00-35 Part 3, Issue 4:06

DEF STAN 00-035, Part 3, Issue 5:17

IEEE Std 1613; IEEE Std 1613a; IEEE Std 1613.1;

IEC 61850-3:02

IEC 61850-3

IEC 60255-21-1



Test Technology:**Test Method(s)¹:**

Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment Section 3: Seismic tests; 4 Requirements for single axis sine sweep seismic test (method A); 5 Requirements for biaxial multi-frequency random seismic test (method B)

IEC 60255-21-3

Needle-based Injection Systems for Medical use — Requirements and Test Methods — Part 1: Needle-based Injection Systems.

ISO 11608-1:15

Section: 10.9 Vibration Testing

Needle-based Injection Systems for Medical use - Requirements and Test Methods - Part 1: Needle-based Injection Systems.

ISO 11608-1

Sections: 10.3.6 Vibration testing – Preconditioning Pen-injectors for Medical use - Part 4: Requirements and Test Methods for Electronic and Electromechanical Pen-injectors.

ISO 11608-4:06

Section: 7.5 Preconditioning by Vibration

Needle-based injection systems for medical use — Requirements and test methods — Part 4: Needle-based injection systems containing electronics; Sections:

ISO 11608-4

10.3.1 Sinusoidal vibration

10.3.2 Random vibration

Medical Electrical Equipment

IEC 60601-1-11:10;

Selected Clauses (10.1.2b, 10.1.3c)

IEC 60601-1-11:15+A1:20

Railway applications — Electronic equipment used on rolling stock (Clauses 4.3.5, 13.4.11 / 4.4.5, 13.4.10)

EN 50155:17; EN 50155:21

Rain or Water (Immersion), Dust, and Salt Fog

Environmental Testing - Part 2:

IEC 60068-2-11:81;

Tests - Test Ka: Salt Mist

IEC 60068-2-11

Environmental Testing - Part 2:

IEC 60068-2-18:00;

Tests - Test R and Guidance: Water

IEC 60068-2-18

Environmental Testing. Part 2: Tests - Test Kb:

IEC 60068-2-52:96;

Salt Mist, Cyclic (Sodium Chloride solution)

IEC 60068-2-52

Degrees of Protection Provided by Enclosure (IP Code)

IEC 60529:89 + A1:99 + A2:13 (*excluding IPX9*)

Enclosures for Electrical Equipment, Environmental Considerations (8.2, 8.3, 8.4.1.2, 8.6)

UL 50E

Environmental Testing - Part 2: Tests -

IEC 60068-2-68

Test L: Dust and Sand

Medical Electrical Equipment

IEC 60601-1-11:10;

Selected clauses (8.3.1)

IEC 60601-1-11

Standard Practice for Operating Salt Spray (Fog)

ASTM B117-11;

Apparatus

ASTM B117-16;

ASTM B117-18;

ASTM B117

Test Technology:

Environmental Engineering Considerations and Laboratory Tests:

Method 506, Rain,
Method 509, Salt Fog,
Method 510, Dust Test
Method 512, Leakage (Immersion)
Method 506.1, Rain,
Method 509.1, Salt Fog,
Method 510.1, Dust (Fine Sand)
Method 512.1, Leakage (Immersion)
Method 506.2, Rain,
Method 509.2, Salt Fog, Procedure I
Method 510.2, Sand and Dust
Method 512.2, Leakage (Immersion)
Method 506.3, Rain,
Method 509.3 Salt Fog,
Method 510.3, Sand and Dust
Method 512.3, Leakage (Immersion)
Method 506.4, Rain,
Method 509.4, Salt Fog,
Method 510.4, Sand and Dust,
Method 512.4, Immersion
Method 506.5, Rain,
Method 509.5, Salt Fog,
Method 510.5, Sand and Dust,
Method 512.5, Immersion
Method 506.6, Rain,
Method 509.6, Salt Fog,
Method 510.6, Sand and Dust,
Method 512.6, Immersion
Method 506.6, Rain,
Method 509.7, Salt Fog,
Method 510.7, Sand and Dust,
Method 512.6, Immersion
Method 506.6, Rain,
Method 509.8, Salt Fog,
Method 510.7, Sand and Dust,
Method 512.6, Immersion
Section 10.0 Waterproofness Test,
Section 12.0 Sand and Dust Test,
Section 14.0 Salt Fog Test

Pen-injectors for Medical use - Part 4: Requirements and Test Methods for Electronic and Electromechanical Pen-injectors.
Section: 7.8 Preconditioning for Dust Test

Test Method(s)¹:

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95

MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93
RTCA/DO-160D:97 + CHG1:00 + CHG2:01 +
CHG3:02;
RTCA/DO-160E:04;
RTCA/DO-160F:07;
RTCA/DO-160G:10 + CHG1:14
ISO 11608-4



Test Technology:

Environmental Handbook for Defense Material;
Section 3: Chapters: CL25, CL26, CL27, CL28,
CL29

Environmental Handbook for Defense Material;
Section 3: Chapters: CL25, CL26, CL27, CL28,
CL29

Railway applications — Electronic equipment used
on rolling stock (Sections 13.4.10 and 13.4.12 /
Sections 13.4.10.5 and 13.4.13)

Free Fall / Drop

Environmental Testing - Part 2: Tests - Test Ec:
Topple

Environmental Testing - Part 2: Tests - Test Ed:
Free Fall (Procedure 1)

Network Equipment - Building System
(NEBS) Requirements: Physical Protection -
Clause 5.3.1 Handling Drop Tests - Packaging
Equipment - Clause 5.3.2, Unpackaged
Equipment Drop Test

Environmental Engineering Considerations
and Laboratory Tests

Method 516.1, Shock, Procedure II, V

Method 516.2, Shock, Procedure II, V

Method 516.3, Shock, Procedure IV, VI

Method 516.4, Shock, Procedure IV, VI

Method 516.5, Shock, Procedure IV, VI

Method 516.6 Shock, Procedure IV, VI

Method 516.7 Shock, Procedure IV, VI

Method 516.8 Shock, Procedure IV, VI

Method 516.8 Shock, Procedure IV, VI
Paragraph 13.0, Category A, B, C, D
Handling Drop

Drop Test of Loaded Containers by Free Fall

Standard Test Methods for Rough Handling of
Unitized Loads and Large Shipping Cases and
Crates

Standard Test Method for Concentrated Impacts to
Transport Packages

Standard test Method for Determining Compressive
Resistance of shipping Containers, Components,
and Unit Loads

Test Method(s)¹:

DEF STAN 00-35 Part 3, Issue 4:06

DEF STAN 00-035, Part 3, Issue 5:17

EN 50155:17; EN 50155:21

IEC 60068-2-31:69 + A1:82;

IEC 60068-2-31

IEC 60068-2-32:75 + A1:88 + A2:90;

GR-63-CORE:06

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95

MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

QM-333

ASTM D4169-99; ASTM D4169-08;

ASTM D4169-09; ASTM D4169-14;

ASTM D4169-16; ASTM D4169

ASTM D5276-98(R2017);

ASTM D5276-19; ASTM D5276

ASTM D6179-07(R2014);

ASTM D6179

ASTM D6344

ASTM D642-00;

ASTM D642-15;

ASTM D642

Test Technology:

Communication Networks and Systems in Substations - Part 3: General Requirements
Clause: 5.5 Mechanical and Seismic
Needle-based injection Systems for Medical use - Requirements and Test Methods - Part 1: Needle-based Injection Systems.
Section: 10.5 Free-fall Testing
Needle-based Injection Systems for Medical use - Requirements and Test Methods - Part 1: Needle-based Injection Systems.
Sections: 10.3.1 Free fall testing – Preconditioning
Pen-injectors for Medical use - Part 4: Requirements and Test Methods for Electronic and Electromechanical Pen-injectors.
Section: 7.4 Preconditioning by Free Fall
Medical Electrical Equipment
Selected clauses (10.1.3d)

Contamination by Fluids

Method 504, Contamination by Fluids

Method 504.1, Contamination by Fluids
Method 504.2, Contamination by Fluids
Method 504.3, Contamination by Fluids
Method 504.3, Contamination by Fluids
Section 11.0 Fluids Susceptibility Test

Explosive Atmosphere

Method 511 Explosive Atmosphere

Method 511.1 Explosive Atmosphere
Method 511.2 Explosive Atmosphere
Method 511.3 Explosive Atmosphere

Method 511.4 Explosive Atmosphere

Method 511.5 Explosive Atmosphere
Method 511.6 Explosive Atmosphere
Method 511.7 Explosive Atmosphere
Method 511.7 Explosive Atmosphere
Section 9.0 Explosive Proofness Test

Test Method(s)¹:

IEC 61850-3

ISO 11608-1:15

ISO 11608-1

ISO 11608-4

IEC 60601-1-11:10;
IEC 60601-1-11

MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93;
RTCA/DO-160D: 97 + CHG1:00 + CHG2:01 +
CHG3:02;

RTCA/DO-160E:04; RTCA/DO-160F:07;

RTCA/DO-160G:10+ CHG1:14

MIL-STD 810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70

MIL-STD 810C:75 + Notice 1:81

MIL-STD 810D:83 + Notice 1:86

MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95

MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03

MIL-STD 810G:08

MIL-STD-810G_CHG-1:2014

MIL-STD-810H:2019

MIL-STD-810H_CHG-1:2022

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93
RTCA/DO-160D: 97 + CHG1:00 + CHG2:01 +
CHG3:02;

RTCA/DO-160E:04; RTCA/DO-160F:07;

RTCA/DO-160G:10+ CHG1:14



Test Technology:

Solar Radiation (Sunshine)

Environmental Testing - Part 2-5: Tests - Test Sa:
Simulated Solar radiation at Ground Level and
Guidance for Solar Radiation Testing
Method 505, Procedure I
Method 505.1, Procedure I
Method 505, Procedure I, II

Method 505.1, Procedure I, II
Method 505.2, Procedure I, II
Method 505.3, Procedure I, II

Method 505.4, Procedure I, II

Method 505.5, Procedure I, II
Method 505.6, Procedure I, II
Method 505.7, Procedure I, II
Method 505.7, Procedure I, II
Paragraphs 24, 25 Simulated Solar Radiation

Acceleration

Method 513, 513.1, Procedure I, II

Method 513.2, Procedure I, II
Method 513.3, Procedure I, II (centrifuge)
Method 513.4, Procedure I, II (centrifuge)

Method 513.5, Procedure I, II (centrifuge), III

Method 513.6, Procedure I, II (centrifuge), III
Method 513.7, Procedure I, II (centrifuge), III
Method 513.8, Procedure I, II (centrifuge), III, IV
Method 513.8, Procedure I, II (centrifuge), III, IV
Section 7.0 Operational Shock and Crash Safety
Test (7.3.3)

Icing

Method 521.0 Icing/Freezing Rain
Method 521.1 Icing/Freezing Rain

Method 521.2 Icing/Freezing Rain

Method 521.3 Icing/Freezing Rain
Method 521.4 Icing/Freezing Rain
Method 521.4 Icing/Freezing Rain
Method 521.4 Icing/Freezing Rain

Test Method(s)¹:

IEC 60068-2-5:75; EN 60068-2-5:99;
IEC 60068-2-5:10; EN 60068-2-5:11;
IEC 60068-2-5; EN 60068-2-5
MIL-STD-810:62
MIL-STD-810A:64
MIL-STD-810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70
MIL-STD 810C:75 + Notice 1:81
MIL-STD 810D:83 + Notice 1:86
MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95
MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03
MIL-STD 810G:08
MIL-STD-810G_CHG-1:2014
MIL-STD-810H:2019
MIL-STD-810H_CHG-1:2022
EN 50130-5:98;
EN 50130-5

MIL-STD-810B:67 + Notice 1:69 + Notice 2:69 +
Notice 3:70 + Notice 4:70
MIL-STD 810C:75 + Notice 1:81
MIL-STD 810D:83 + Notice 1:86
MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95
MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03
MIL-STD 810G:08
MIL-STD-810G_CHG-1:2014
MIL-STD-810H:2019
MIL-STD-810H_CHG-1:2022
RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93;
RTCA/DO-160D: 97 + CHG1:00 + CHG2:01
+CHG3:02;
RTCA/DO-160E:04;
RTCA/DO-160F:07;
RTCA/DO-160G:10+ CHG1:14

MIL-STD 810D:83 + Notice 1:86
MIL-STD 810E:89 + Notice 1:90 + Notice 2:93 +
Notice 3:95
MIL-STD 810F:00 + Notice 1:00 + Notice 2:02 +
Notice 3:03
MIL-STD 810G:08
MIL-STD-810G_CHG-1:2014
MIL-STD-810H:2019
MIL-STD-810H_CHG-1:2022



Test Technology:

Section 24.0 Icing

Highly Accelerated Life Test

Cold Temperature Steps

Hot Temperature Steps

Rapid Temperature Changes

Random Vibration - 3 Axis

Combined Temperature and Vibration

Highly Accelerated Stress Screening (HASS)

Stress Profile Definition

Test Method(s)¹:

RTCA DO-160C:89+CHG1:90+CHG2:92+CHG3:93

RTCA/DO-160D: 97 + CHG1:00 + CHG2:01 +

CHG3:02;

RTCA/DO-160E:04; RTCA/DO-160F:07;

RTCA/DO-160G:10+ CHG1:14

GM Worldwide Engineering Standards Test

Procedure Analysis GMW8287

¹ Note: When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - *General Requirements-Accreditation of ISO-IEC 17025 Laboratories*.



Accredited Laboratory

A2LA has accredited

HERMON LABORATORIES

Binyamina, Israel

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 12th day of September 2023.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0839.04
Valid to May 31, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.