



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Environment Associates, Inc.
9604 Variel Avenue
Chatsworth, CA 91311

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to be 'Jason Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 13 June 2024

Certificate Number: L2140



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 Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Environment Associates, Inc.
9604 Variel Avenue
Chatsworth, CA 91311
Q.A. Director/Q.A. Rep – Steve Hollinger
818 709 0568

TESTING

Valid to: **June 13, 2024**

Certificate Number: **L2140**

Environmental Simulation

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|--|---|------------------------------------|--|
| Thermal (-180 to 300) °C | MIL-STD-202 Methods: 107 MIL-STD-883 Method: 1011 MIL-STD-810 Methods: 501, 502, 503, 524 IEC 60068-2-1, 2-2, 2-14 RTCA/DO 160 | Various | Cycling Temperature, Temperature Shock Freeze Thaw & Resistance to Solder Heat. |
| Thermal-Vacuum (-180 to 180) °C Up to 1×10 ⁻⁶ Torr | ASTM E2900, ASTM E 595-15, SMC-S-016 | Various | Hi-Vac Chamber, Vacuum Control System, Temperature Plate, Thermocouple, Data Logger, LN ₂ |
| Rain | MIL-STD-810 Methods: 506, 521 RTCA/DO 160 | Various | Rain Exposure Freezing Rain |
| Solar Radiation | MIL-STD-810 Method: 505 | Various | Solar Radiation Exposure |
| Combined Environment (-65 to 100) °C (10 to 95) %RH 150k ft | MIL-STD-810 Method: 520 RTCA/DO 160 | Various | Temperature, Altitude, Icing & Humidity |



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|---|---|------------------------------------|---|
| Altitude Site to 650k ft | MIL-STD-810 Method: 500 MIL-STD-202 Method: 105 IEC 60068-2-13 RTCA/DO 160 ASTM D4169 ASTM D6653 | Various | Altitude Temperature Altitude |
| Temperature / Humidity (-20 to 100) °C (10 to 95) %RH | MIL-STD-810 Method: 507 MIL-STD-202 Method: 103,106 RTCA/DO 160 IEC 60068-2-30, 2-78 | Various | Humidity-Temperature & Moisture Resistance |
| Salt Spray | MIL-STD-883 Method: 1009 MIL-STD-810 Method: 509 MIL-STD-202 Method: 101 IEC 60068-2-11 ASTM B117 RTCA/DO 160 | Various | Salt Spray Salt Fog & Corrosion |



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|--|---|---|---|
| Sand & Dust | MIL-STD-202 Method: 110 MIL-STD-810 Method: 510 RTCA/DO 160 IEC 60068-2-68 | Various | Sand & Dust Exposure |
| Fluid Susceptibility | MIL-STD-810 Methods: 504, 512 MIL-STD-202 Methods: 104, 215 RCTA/DO 160 | Various | Fluid & Chemical Exposure & Immersion |
| Conditioning Up to 250 °C | MIL-STD-202 Method: 108 ASTM D4332 | Various | Ambient or Specified |
| Enclosure Protection | IEC 60529 | Various | Material and Fluid Ingress and Hazardous Access |

Vibration and Mechanical

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|---|------------------------------------|---|
| <p>Vibration</p> <p>(0.5 to 100) g Sine (0.5 to 80) g RMS</p> | <p>MIL-STD-167</p> <p>MIL-STD-810 Methods: 514, 519, 528</p> <p>MIL-STD-883 Method: 2007</p> <p>MIL-STD-202 Methods: 201, 204, 214</p> <p>IEC 60068-2-6, 2-64</p> <p>RTCA/DO 160</p> <p>ASTM D4169 ASTM D999 ASTM D4728</p> | <p>Various</p> | <p>Sine, Random, Sine on Random & Gunfire Vibration</p> |
| <p>Acceleration</p> <p>100 g MAX</p> | <p>MIL-STD-883 Method: 2001</p> <p>MIL-STD-810 Method: 513</p> <p>MIL-STD-202 Method: 212</p> | <p>Various</p> | <p>Acceleration</p> |
| <p>Mechanical Shock</p> <p>10000 g Max</p> | <p>MIL-STD-883 Method: 2002</p> <p>MIL-STD-810 Methods: 516, 517, 519, 522</p> <p>MIL-STD-202 Methods: 207, 213</p> <p>IEC 60068-2-27</p> <p>RTCA/DO 160</p> | <p>Various</p> | <p>Pyrotechnic Shock, Specified Pulse Shock</p> |

Vibration and Mechanical

| Specific Tests and/or Properties Measured | Specification, Standard, Method, or Test Technique | Items, Materials or Product Tested | Key Equipment or Technology |
|---|--|------------------------------------|--|
| Impact / Drop | MIL-STD-202 Method: 203 IEC 60068-2-31 RTCA/DO 160 ASTM D4169 ASTM D5276 ASTM D880 ASTM D6055 ASTM D6179 ASTM D6344 | Various | Corner Drop, Edge Drop, Flat Drop & Impact |
| Compression Up to 5 000 lbs | ASTM D4169 ASTM D642 | Various | Flat Compression |
| Explosion | MIL-STD-202 Method: 109 MIL-STD-810 Method: 511 RTCA/DO 160 | Various | Explosive Atmosphere |
| Seal | MIL-STD-202 Method: 112 ASTM D4169 ASTM D951 | Various | Seal Effectiveness |

Notes:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2140.
2. This laboratory offers commercial testing service.
3. Comparable methods of the prior revisions of the documents listed on this scope may be used.
4. Customer specifications derived from the technologies listed above may be used.



Jason Stine, Vice President

