

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

AAA Test Lab Inc.

2320 Commerce Park Drive NE, Palm Bay, FL 32905

(Hereinafter called the Organization) and hereby declares that Organization 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 (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Chemical, Dimensional Inspection, Electrical, Mechanical, Non-Destructive, and Thermodynamic Testing (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

89271

For PJLA:

Initial Accreditation Date:

Issue Date:

Expiration Date:

September 20, 2016

October 11, 2022

December 31, 2024

Tracy Szerszen Accreditation No.:
President

L22-673

Certificate No.:

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325

Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjlabs.com



Certificate of Accreditation: Supplement

AAA Test Lab Inc.

2320 Commerce Park Drive NE, Palm Bay, FL 32905 Contact Name: Melissa Marmo Phone: 877-369-6547

Accreditation is granted to the facility to perform the following testing:

| FIELD OF TEST | ITEMS, MATERIALS OR PRODUCTS TESTED | SPECIFIC TESTS OR PROPERTIES MEASURED | SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED | RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT |
|--|--|--|---|--|
| Chemical ^F | Solvent Test for Remarking & Resurfacing | Visual | AS6081-4.2.6.4.3 AS6171/2 - 5.3.3.1.1 thru 5.3.4.5 | Visual Evaluation |
| Dimensional Inspection ^F | Inspection External/ Visual Inspection (Optically Examined at Magnification and Lighting Sufficient to Detect the Particular Feature being Examined) | Electronic Components | AS6081-4.2.6.4.2.1 AS6081-4.2.6.4.2.2 AS6171/2 - 5.3.5 Microscope video magnification | N/A |
| | Package Size | Electronic Components | Calipers AS 6081 MIL-STD- 750 Micrometers AS 6081 MIL-STD- 750 | 0.005 in to 6 in (0.2 mm to 150 mm) 0.000 05 in to 1 in (0.001 mm to 25 mm) |
| Electrical ^F | Propagation Delay, Memory Read/Write Speed, Timing | Logic Voltage Level Sample Clock | KEYSIGHT Logic Analyzer | -5 V to 5 V 500 ps to 1 ms |
| | Bandwidth and Rise Time Analog and Digital | Amplitude Band Width Rise Time | KEYSIGHT Digital Oscilloscope | 1 mV to 10 V DC to 200 MHz 20 ns |
| | Electrical Testing | Electrical Testing | AS6171/7 - 4.2 Electrical Testing Requirements | N/A |
| | Battery, Electrical Components, and Semiconductors | DC In-Circuit Current Measure AC Current | Multimeter Keithley 2001 | 100 µA to 12 A DC 1 nA to 1 A AC 20 Hz to 50 KHz |
| | | Measure AC Volts RMS Average & Peak Measure DC Current | | 1 μV to 700 VAC 1 Hz to 100 KHz 100 pA to 2 A DC |
| | | Measure DC Volts Measure DC Volts Peak Spikes + or - | | 50 nV to 1 000 VDC 2 mV to 200 V DC to 1 MHz |
| | Frequency Counter | Frequency Period Measurement | | 1 Hz to 15 MHz 67 ns to 1 s |
| | Two-Wire and Four- Wire Ohms | Resistance Measurements | | 10 μΩ to 1 GΩ |





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|------------------------------|--|--|--|--|
| Electrical ^F | Battery, Electrical | Six-Wire Ω | Keithley 2420 | $0.2~\Omega$ to $200~\text{M}\Omega$ |
| | Components, and | Two Wire and Four Wire | | |
| | Semiconductors | Ω | | |
| | | Source Voltage and | | Source Voltage: |
| | | Measure Current | | 5 μV to 60 V |
| | | | | Measure Current: |
| | | | | 0.001 μA to 3 A |
| | | Source Current and | | Source Current: |
| | | Measure Voltage | | 0.001 μA to 3 A |
| | | 774 | | Measure: |
| 3.6 1 : 1E | T | 77. 1 | 196001 12616 | 0.005 mV to 60 V |
| Mechanical ^F | Inspection | Visual | AS6081-4.2.6.4.6 | Visual Evaluation |
| | Internal Analysis-Delid / De-capsulation | | AS6171/4 - 3.4.1 Verify that the die | |
| | (Destructive) | | markings and internal | |
| | (Destructive) | | package or die construction | |
| | | | is consistent with a known | |
| | | | authentic part | |
| Non-Destructive ^F | X-ray-Radiological | | AS6081-4.2.6.4.4 | |
| | Inspection | | AS6171/5 - 3.2.5 - 3.2.7 | |
| | X-ray Spectroscopy XRF- | Confirm the Elemental | AS6081-4.2.6.4.5 | Presence/Absence |
| | Lead Finish Evaluation | Composition of the Leads | AS6171/3 - 5.4.2 | |
| | | | Spectroscopy and | |
| | | | Reference Component | |
| Thermodynamic ^F | Fluid & Air Temperature | Electronic Components | Thermal Forcing Unit | -65 °C to 225 °C |
| | | | Temperature Probes | |

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.