



# 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 17025:2005**

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 January 2009):

***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.

For PJLA:

Tracy Szerszen  
President/Operations Manager

<i>Initial Accreditation Date:</i>	<i>Issue Date:</i>	<i>Expiration Date:</i>
September 20, 2016	September 20, 2016	December 31, 2018
<i>Revision Date:</i>	<i>Accreditation No.:</i>	<i>Certificate No.:</i>
December 8, 2017	89271	L16-399-R1

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](http://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 <sup>F</sup>	Solvent Test for Remarketing & Resurfacing	Visual	AS6081- 4.2.6.4.3	Visual Evaluation
Dimensional Inspection <sup>F</sup>	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 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 – Multimeter 7.5 Digit <sup>F</sup>	Battery, Electrical Components, and Semiconductors	DC In-Circuit Current	Multimeter Keithley 2001	100 $\mu$ A to 12 A DC
		Measure AC Current		1 nA to 1 A AC 20 Hz to 50 KHz
		Measure AC Volts RMS Average & Peak		1 $\mu$ V to 700 VAC 1 Hz to 100 KHz
		Measure DC Current		100 pA to 2 A DC
		Measure DC Volts		50 nV to 1 000 VDC
		Measure DC Volts Peak Spikes + or -		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 $\mu$ $\Omega$ to 1 G $\Omega$		
Electrical – Sourcemeter 6.5 Digit <sup>F</sup>	Battery, Electrical Components, and Semiconductors	Six-Wire $\Omega$	Keithley 2420	0.2 $\Omega$ to 200 M $\Omega$
		Two wire and four wire $\Omega$		Source Voltage: 5 $\mu$ V to 60 V
		Source Voltage and measure Current		Measure Current: 0.001 $\mu$ A to 3 A 10 A pulse



# 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
Electrical – Sourceme <sup>F</sup> ter 6.5 Digit <sup>F</sup>	Battery, Electrical Components, and Semiconductors	Source current and measure Voltage	Keithley 2420	Source Current: 0.001 $\mu$ A to 3 A 10 A pulse
				Measure: 0.005 mV to 60 V
Mechanical <sup>F</sup>	Inspection Internal Analysis-Delid / De-capsulation (Destructive)	Visual	AS6081-4.2.6.4.6 Verify that the die markings and internal package or die construction is consistent with a known authentic part	Visual Evaluation
Non-Destructive <sup>F</sup>	X-ray- Radiological Inspection	Visual	AS6081-4.2.6.4.4	Visual Evaluation
	X-ray Spectroscopy XRF-Lead Finish Evaluation	Confirm the elemental composition of the leads	AS6081-4.2.6.4.5 Spectroscopy and reference component	Presence/Absence
Thermodynamic <sup>F</sup>	Fluid & Air Temperature	Electronic Components	Thermal Forcing Unit Temperature Probes	-65 °C to 225 °C

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