g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS3800NATG**

Test Procedure for a DS3800NATG

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Glenn Chandler	10/30/2013
B			
C			

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DATE	**DATE**	**DATE**	**DATE**
10/30/2013			10/30/2013

1. SCOPE

1.1 This is a functional testing procedure for a DS3800NATG.

2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
3.1.1 Check board's electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning
4.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.
4.2 Equipment Inspection
4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
4.2.1.1 Wires - broken, cracked, or loosely connected
4.2.1.2 Terminal strips / connectors - broken or cracked
4.2.1.3 Components - visually damaged
4.2.1.4 Capacitors - bloated or leaking
4.2.1.5 Solder joints - damaged or cold
4.2.1.6 Circuit board - burned or de-laminated
4.2.1.7 Printed wire runs / Traces - burned or damaged

5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
2		Fluke 87 DMM (or Equivalent)
1		30VDC Power Supply
1		1K Resistor

6. Testing Process

6.1 Setup

6.1.1 This card consists of 2 separate attenuator circuits consisting of 35 249k ohm resistors in series, with a 220pf capacitor in parallel with each resistor in each circuit. It also provides limiting zener diodes to each circuit.

6.2 Testing Procedure

6.2.1 Verify each row of 3 resistors measure 747K ohms +/- 3% and each row of 2 resistors measures 498K ohm +/- 2%.

6.2.2 Pay particular attention to the tolerances because this card has a known problem with leaky capacitors.

6.2.3 Verify ATO-A to AT1-A measures 2.241M ohm +/- 9%

6.2.4 Verify AT1-A to AT2-A measures 2.988M ohm +/-12%

6.2.5 Verify AT2-A to AT3-A measure 3.486M ohm +/-14%

6.2.6 Repeat the steps for circuit B. (AT0-B to AT1-B) and so on.

6.2.7 Apply +30Vdc through a 1K ohm resistor to AT0-A and common to ATG-A. Connect a volt meter between AT0-A and ATG-A. Verify +22.7Vdc +/-5%. Reverse polarity of the power supply and verify -22.7Vdc +/-.

6.2.8 Repeat these steps for circuit B (ATO-B to ATG-B)

6.3 ***TEST COMPLETE ***

7. Notes

7.1 None at this time.

8. Attachments

8.1 None at this time.