g GE Industrial Systems *Renewal Services* *Louisville,KY*	**Functional Testing Specification** **LOU–GED-193X255xx**

Test Procedure for a Card

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

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Functional test procedure for

1. SCOPE

1.1 This is a functional testing procedure for a.

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.
2.1.1

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 the local documented procedures 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 or cracked
  - **4.2.1.2** Terminal strips / connectors broken or cracked
  - **4.2.1.3** Loose wires
  - **4.2.1.4** Components visually damaged
  - **4.2.1.5** Capacitors leaking
  - **4.2.1.6** Solder joints damaged or cold
  - **4.2.1.7** Circuit board burned or de-laminated
  - **4.2.1.8** Printed wire runs 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
1		SCR Firing Box
1		Light Bulbs
1	H033531	Fixture
1		Oscilloscope
1		Power Supply(20vdc)

6. TESTING PROCESS

6.1 Setup

6.1.1 Secure the card to the top of the fixture with the appropriate hardware

6.1.2 Plug the wires into the card from the fixture (HA and HB are not used)

6.1.3 On the Non-Isolated side of the SCR firing box connect the following: com(SCR) to com(fixture), positive(SCR) to + pulses(fixture)

6.1.4 Set the switches of the SCR firing box to off and normal

6.1.5 Connect two light bulbs in parallel into the appropriate jacks on the fixture

6.1.6 Plug the oscilloscope into the same jacks as the light bulbs

6.1.7 Connect power supply into the fixture (+ goes to 20vdc and – goes to com)

6.2 Testing Procedure

6.2.1 Plug 120vac into the fixture

6.2.2 Apply the 20vdc from the power supply

6.2.3 Turn on the oscilloscope

6.2.4 Switch the SCR firing box on

6.2.5 Turn the potentiometer and watch the waveform's signal increase; fully clockwise the waveform appears as figure 1.

6.3 ***TEST COMPLETE ***

7. NOTES