g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS200KLDxxxx**

Test Procedure for a Display card for an IOS Panel

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	J. Barton	10/10/2008
B	Added new modification to IOS assembly to reduce shipping damage	M. Starling	6/9/2010
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
J. Barton	M. Starling		Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
10/10/2008	6/9/2010		10/10/2008

1. SCOPE

1.1 This is a functional testing procedure for an IOS Display Card.

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 None noted at this time.

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, 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
1	H188629	IOS Panel

6. TESTING PROCESS

6.1 New Modification 6-9-2010.

6.1.1 In an effort to reduce shipping damage to a complete IOS assembly please perform the following modifications.

6.1.2 Cut nipples off of the four corners, front and back side of the grey card carrier. Leaved all other nipples intact.

6.1.3 Using a scrap card that fits the card carrier, select a drill bit that is the same size as the four corner holes of the scrap card.

6.1.4 Snap scrap board into the carrier and use drill press to drill holes through the four corners of the carrier. The scrap card acts as a guide to keep the drill centered, and to locate holes in proper position.

6.1.5 Remove scrap board and install customers card. Select the appropriate length #6 screw and #6 shoulder nut and fasten customers card to the card carrier.

6.2 Setup

6.2.1 Install unit with DS200KLDBF1CBA firmware or later in test rack and make appropriate connections.

6.3 Testing

6.3.1 Upon power up verify units displays flashes 0/1's on displays and all LEDS flash on and off.

6.3.2 Unit will boot to either test program previously loaded into DMCB

6.3.3 Press DEC button unit "**** UTIL" is illuminated on bottom left display.

6.3.4 Press Enter

6.3.5 Press DEC until KY/LED/DSP is selected on bottom left display

6.3.6 Press enter

6.3.7 The top 6 displays will alternate flashes of either "*" (asterisk) or "0"'s

6.3.8 Bottom left display will display "DUP KEY 0"

6.3.9 LEDS will alternate from row 1 and 3 to 2 and 4 respectively.

6.3.10 Test individual keypad buttons and hold, the ID of the key depressed will be displayed on bottom left display.

6.3.11 After all keys have been successfully depressed and displayed correctly on bottom display,

6.4 ***TEST COMPLETE *

7. NOTES

7.1 None noted at this time

8. ATTACHMENTS

8.1