#### **TEST UNIT AND EQUIPMENT:**

GU180X32D-K610A8 serial 639985 was tested between 19-Feb and 20-Feb, 2008.

Weiss WKL 100 Environmental Chamber serial 2200499200 calibrated 14-Aug-2007. Agilent E4402B spectrum analyser PA0193 calibrated 9-Nov-2007.

#### **OPERATING CONDITION:**

RF emission and ESD: Vcc = 5V, GND = 0V, module operating in self-test mode. Temperature test: Vcc = 5.25V and 4.75V, module operating in self-test mode.

#### **TEMPERATURE RANGE:**

The module was brought to temperature in the Weiss-Technik chamber and stabilised for the specified time at each temperature before being powered on in self-test mode. Then visual quality of the display was inspected.

| Temp | Duration | Observation   |  |
|------|----------|---------------|--|
| -40C | 1hour    | Off, storage  |  |
| -40C | 30mins   | Operating, OK |  |
| +85C | 15hours  | Off, storage  |  |
| +85C | 1hour    | Operating, OK |  |

### **ELECTRO-STATIC DISCHARGE (Method IEC 6100-4-2):**

The module was powered up in self-test mode on the test table. There it was exposed to contact and air discharges applied to the ribbon cable across the module face, the horizontal conductive plane under the module, and the vertical conductive plane.

| Observation                         | Contact Discharge | Air Discharge |
|-------------------------------------|-------------------|---------------|
| Lowest voltage discharged           | 1kV               | 8kV           |
| Temporary spurious ON/OFF of pixels | None              | None          |
| Module reset or lock-uo             | None              | None          |
| Permanent damage                    | None              | None          |
| Highest voltage discharged          | 9kV               | 16kV          |

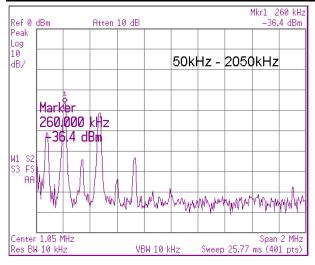
#### **CONDUCTED RF EMISSION TEST:**

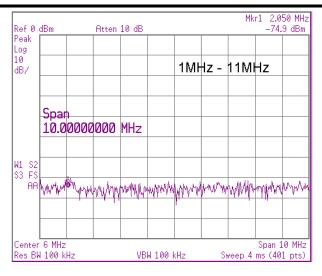
The 50-ohm input of the Agilent E4402B spectrum analyser was AC-coupled to the 5V supply of the module. While the module performed self-test, the spectra shown overleaf were taken:

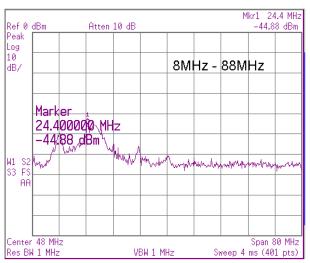
| Start   | Stop     | Spectra         | Significant UUT peaks          |
|---------|----------|-----------------|--------------------------------|
| 50 kHz  | 2050 kHz | UUT             | -36dBm @260kHz, -42dBm @520kHz |
| 1 MHz   | 11 MHz   | UUT             | None                           |
| 8 MHz   | 88 MHz   | UUT, background | -44dBm @29.8MHz                |
| 80 MHz  | 280 MHz  | UUT, background | -55dBm @111MHz                 |
| 0.2 GHz | 3 GHz    | UUT             | None                           |

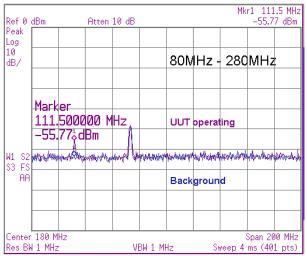
## **Environmental Test**

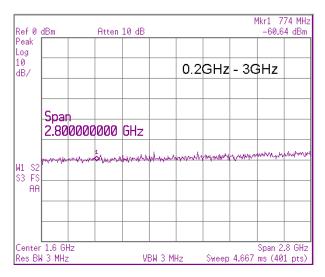
# GU180x32D-K610A8











Peak at 153MHz is local interference (ship-to-shore), not associated with operation of Module under test

#### CONTACT

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