

TEST UNIT AND EQUIPMENT:

GU128X32D-K610A8 serial 670982 was tested between 19-Feb and 20-Feb, 2008.
Weiss WKL 100 Environmental Chamber serial 2200499200 calibrated 14-Aug-2007.
Schaffner NSG435 ESD Simulator PA0138 uncalibrated.
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):

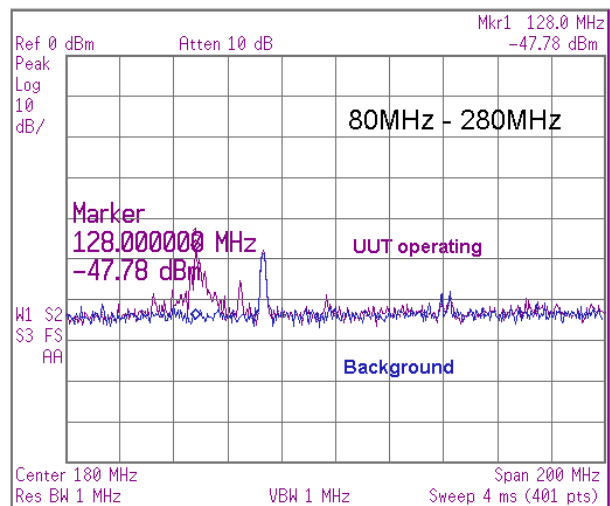
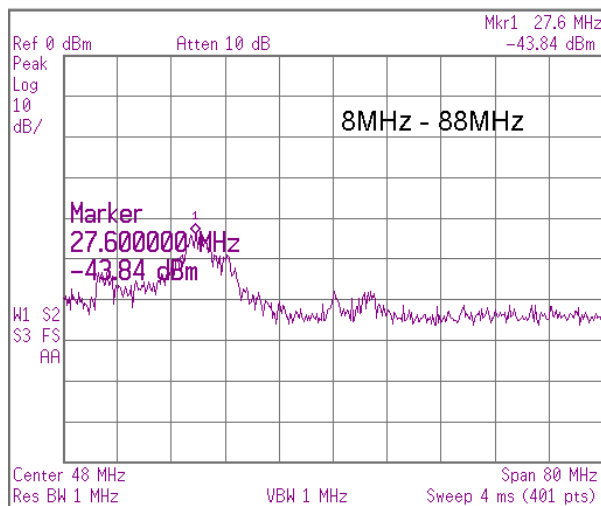
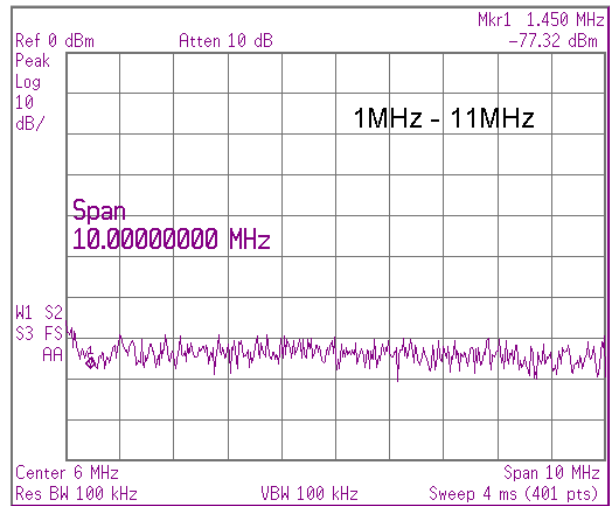
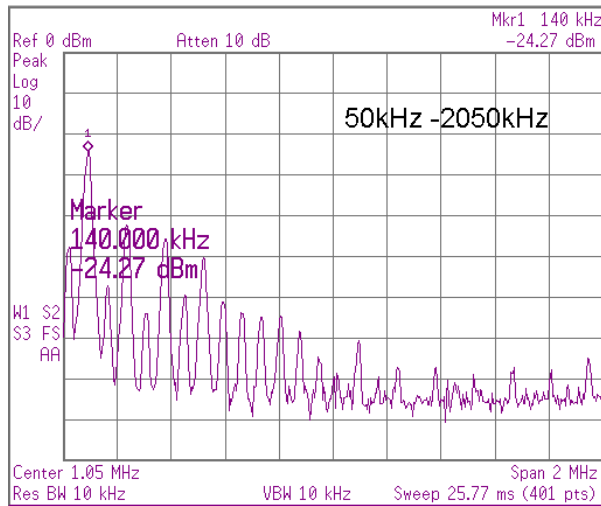
The module was powered up in self-test mode on the test table. There it was exposed to contact and air discharges applied to the ribbon cable across the module face, the horizontal conductive plane under the module, and the vertical conductive plane.

Observation	Contact Discharge	Air Discharge
Lowest voltage discharged	1kV	8kV
Temporary spurious ON/OFF of pixels	7kV	14kV
Module reset or lock-up	None	None
Permanent damage	None	None
Highest voltage discharged	9kV	16kV

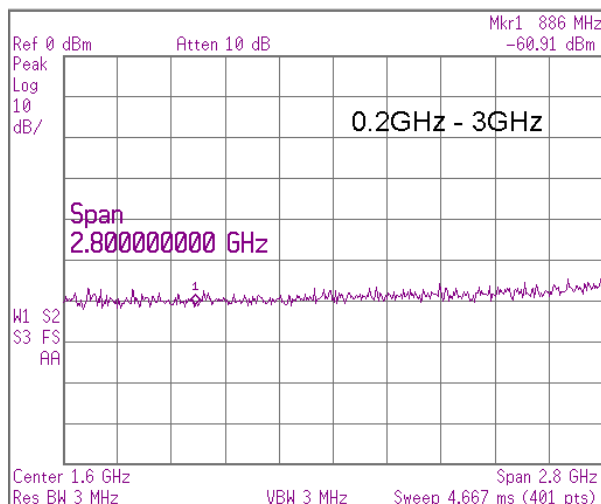
CONDUCTED RF EMISSION TEST:

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	-24dBm @140kHz, -42dBm @280kHz
1 MHz	11 MHz	UUT	None
8 MHz	88 MHz	UUT	-43dBm @27.6MHz
80 MHz	280 MHz	UUT, background	-47dBm @128MHz
0.2 GHz	3 GHz	UUT	None



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



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