

**TEST UNIT AND EQUIPMENT:**

GU144x40D-K610A8.v4 #519162 was tested between 4-Mar and 5-Mar, 2008.

Weiss WKL 100 Environmental Chamber serial 2200299200 calibrated 14-Aug-2007.

Shaffner 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 in the sequence, and for the durations shown. Module was powered on in self-test mode, and visual quality of display observed.

Temp	Duration	Observation
-40C	2 hours	Off, storage
-40C	1 hour	Operating, OK
+85C	3 hours	Off, storage
+85C	1 hour	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.

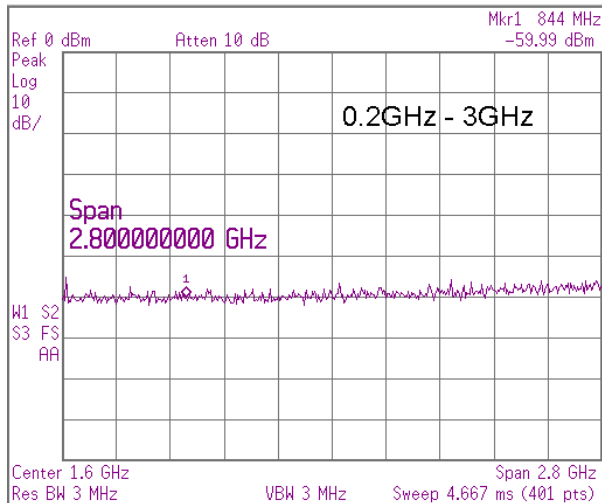
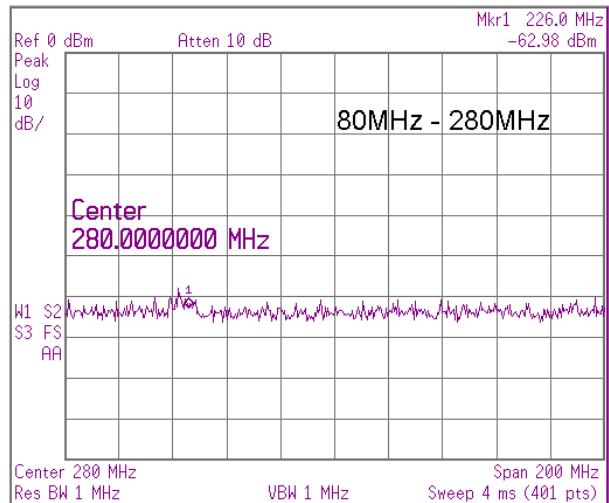
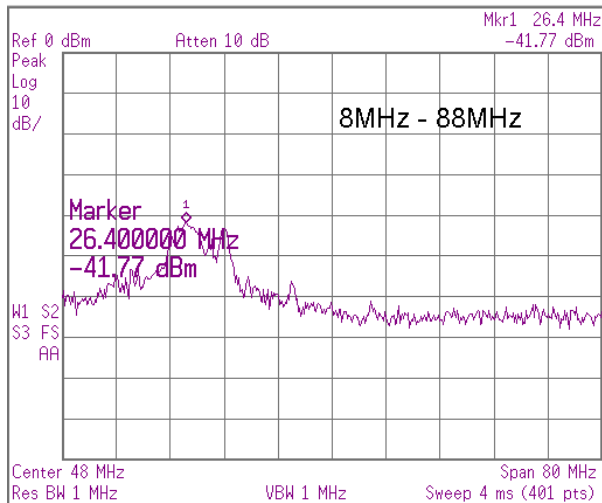
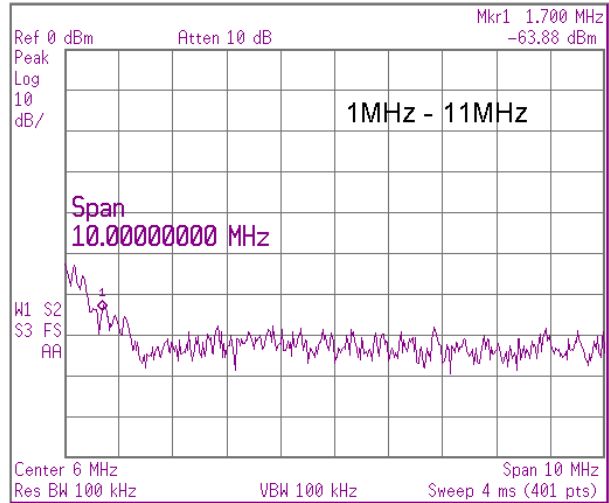
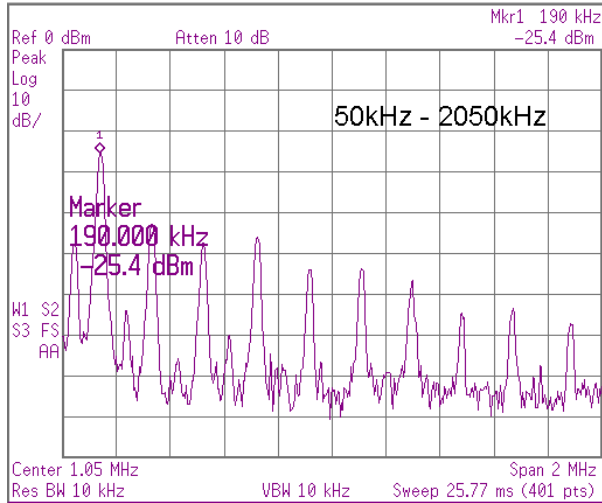
Observation	Contact Discharge	Air Discharge
Lowest voltage discharged	3kV	8kV
Temporary spurious ON/OFF of pixels	7kV	12kV
Module reset or lock-up	9kV	12kV
Permanent damage	None	None
Highest voltage discharged	9kV	16kV

**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	-25dBm @190kHz
1 MHz	11 MHz	UUT	None
8 MHz	88 MHz	UUT	-41dBm @26.4MHz
80 MHz	280 MHz	UUT	None
0.2 GHz	3 GHz	UUT	None



### CONTACT

**Noritake Sales Office Tel Nos**  
 Nagoya Japan: +81 (0)52-561-9867  
 Canada: +1-416-291-2946  
 Chicago USA: +1-847-439-9020  
 Munchen (D): +49 (0)89-3214-290  
 Itron UK: +44 (0)1493 601144  
 Rest Europe: +49 (0)61-0520-9220  
[www.noritake-itron.com](http://www.noritake-itron.com)

Subject to change without notice. IUK Doc Ref: 10921 Iss:1 6Mar08