

TEST UNIT AND EQUIPMENT:

GU96X8M-K612C5.v4 #767573 was tested between 12-Mar and 13-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 to display text, and visual quality of display observed.

Temp	Duration	Observation
-40C	2 hours	Off, storage
-20C	1 hour	Operating, OK
+85C	16 hours	Off, storage
+70C	1 hour	Operating, OK

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

The module was powered up displaying text 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.

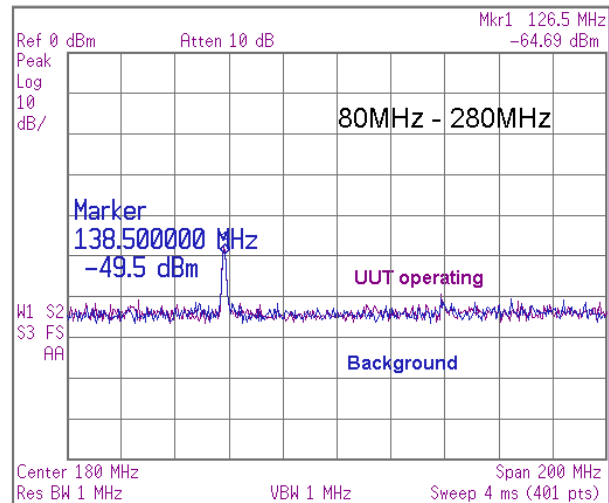
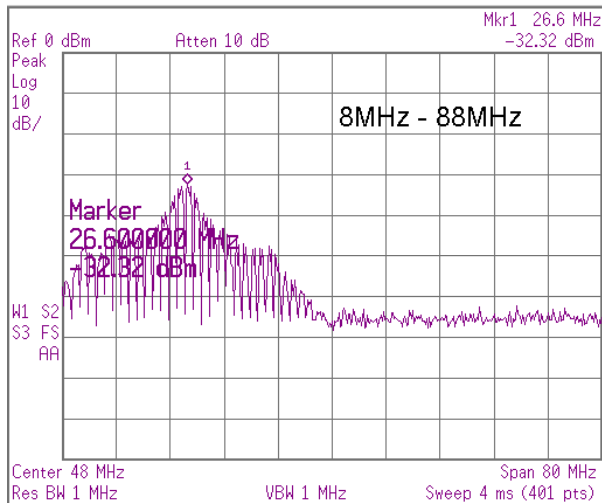
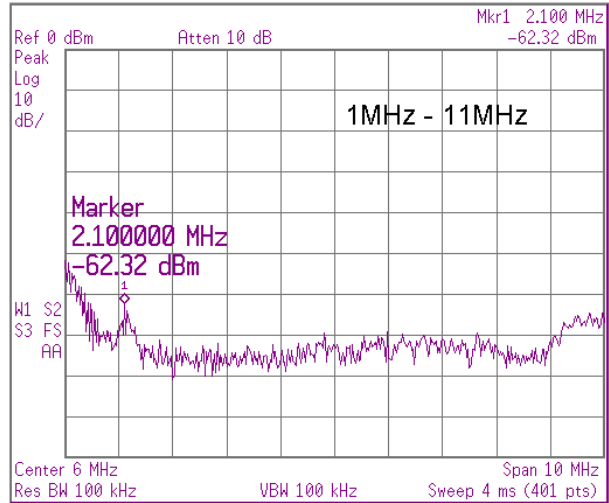
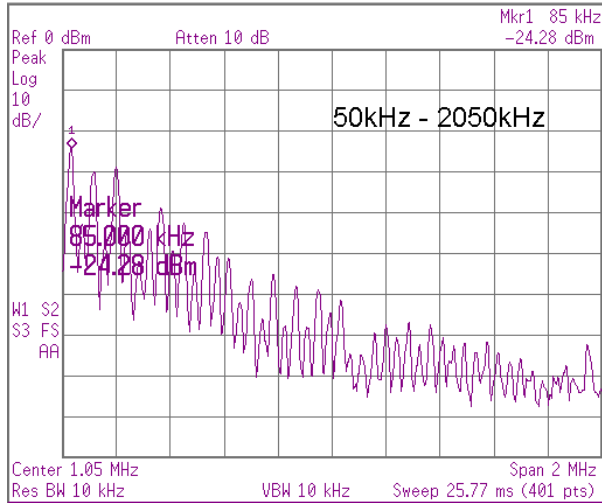
Observation	Contact Discharge	Air Discharge
Lowest voltage discharged	1kV	4kV
Temporary spurious ON/OFF of pixels	3kV	8kV
Module reset or lock-up	None	None
Permanent damage	None	None
Highest voltage discharged	9kV	16kV

CONDUCTED RF EMISSION TEST:

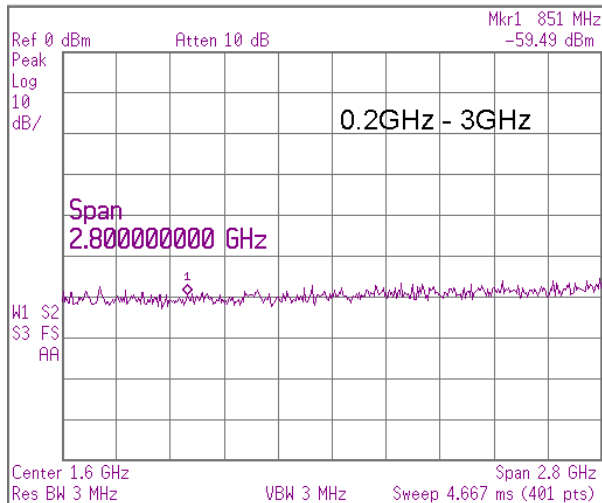
The 50-ohm input of the Agilent E4402B spectrum analyser was AC-coupled to the 12V supply of the module.

While the module performed displayed text, the spectra shown overleaf were taken:

Start	Stop	Spectra	Significant UUT peaks
50 kHz	2050 kHz	UUT	-24dBm @85kHz, -29dBm @250kHz
1 MHz	11 MHz	UUT	-62dBm @2.1MHz
8 MHz	88 MHz	UUT	-32dBm @26.6MHz
80 MHz	280 MHz	UUT, background	None
0.2 GHz	3 GHz	UUT	None



The peak at 138.5MHz is local interference (ship-to-shore), not produced by the module under test



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-iron.com