

TEST UNIT AND EQUIPMENT:

CU20049-KTW220A serial number 645918 was tested between 21-Mar and 22-Mar, 2007.
Weiss WKL 100 Environmental Chamber serial 2200499200 calibrated 11-May-2006.
Shaffner NSG435 ESD simulator PA0138 uncalibrated.
Agilent E4402B spectrum analyser PA0193 calibrated 7-Nov-2006.

OPERATING CONDITION:

VCC = 5V, GND = 0V Module powered in Self Test mode

TEMPERATURE RANGE:

The module was brought to temperature in the Weiss-Technik chamber and stabilised for the period shown at each temperature before being powered on in self-test mode. Visual quality of display was observed.

Temp	Duration	Observation
-40C	1hour	Off, storage
-40C	30mins	Operating, OK
+85C	2hours	Off, storage
+85C	30mins	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	2kV
Temporary spurious ON/OFF of pixels	3kV	4kV
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	-52dBm @75kHz
1 MHz	11 MHz	UUT	None
8 MHz	88 MHz	UUT	-38dBm @27MHz
80 MHz	280 MHz	UUT, background	-50dBm @85MHz
0.2 GHz	3 GHz	UUT	None

PSU frequency:

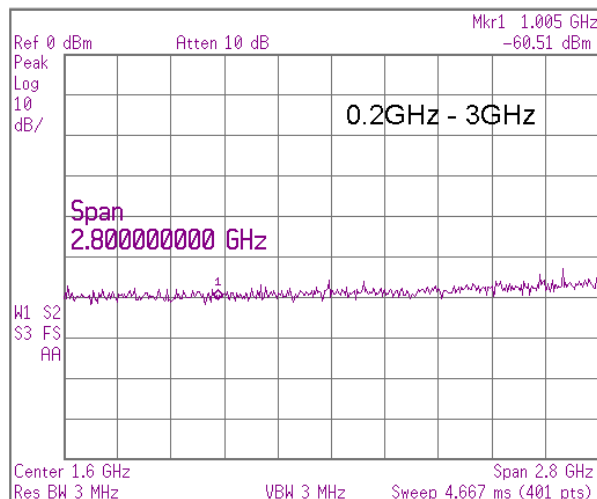
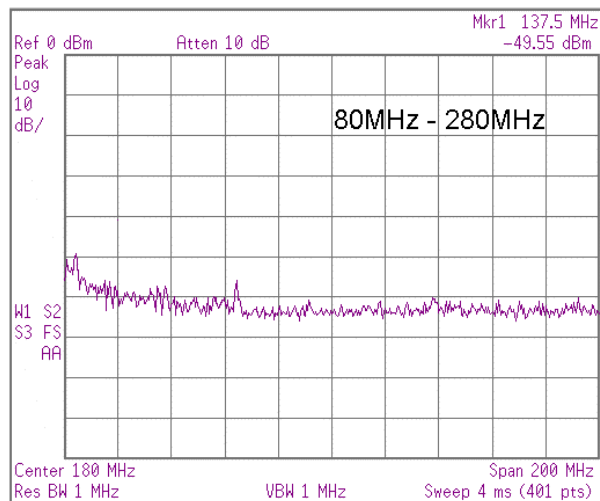
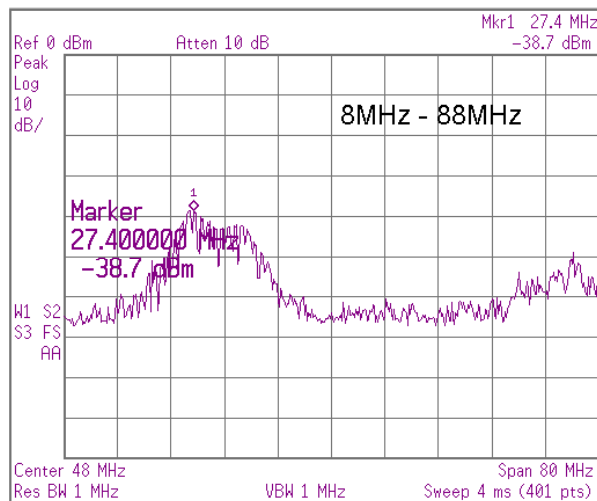
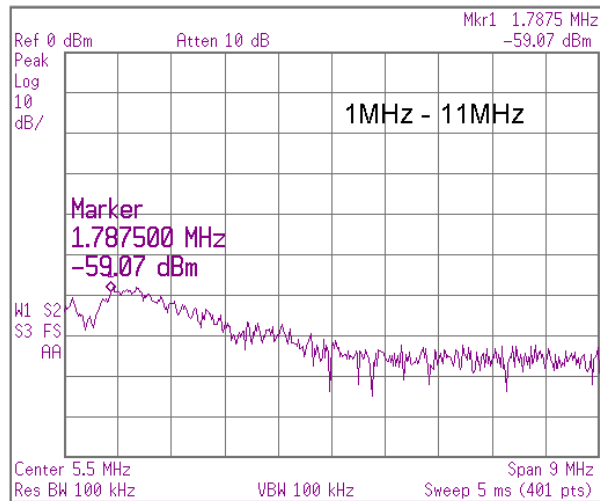
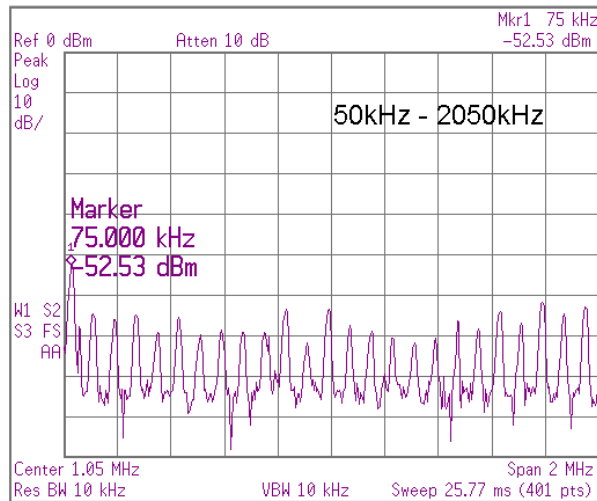
Module spectrum shows a worst peak of -52dBm at 75kHz.

Clock frequency:

Module spectrum shows a worst peak of -38dBm at 27.4MHz.

VHF:

Reference spectrum shows a ship-to-shore peak at 137.5MHz. Module is responsible for -50dBm peak at 85MHz.



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