



AM35x SOM-M2 Radiated Emissions Scan: 30 MHz – 1 GHz White Paper 449

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Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
A	JCA, NJK	Initial release	NJK	09/02/10

1 AM35x SOM-M2 Radiated Emissions Scans: 30 MHz – 1 GHz

The AM35x SOM-M2 was scanned at Northwest EMC in Brooklyn Park, MN.

2 Wireless Test Results

The AM35x SOM-M2 was connected to a standard eXperimenter baseboard. The only connection to the baseboard was the power supply; an antenna was connected to the SOM at J4.

The unit under test was running Linux version 2.6.32. This version of Linux sets up most of the peripherals on the SOM (GPMC, GPIO, Display, USB, NAND, I2C, Ethernet, Serial, CAN, RTC, Audio), but they were not necessarily transferring data during the test.

Table 2.1 lists the known frequencies generated on the AM35x SOM-M2 with Linux running.

Table 2.1: Frequencies Generated while Running Functional Test Code

Source	Frequency
DPLL1	500 MHz
DPLL3	332 MHz
DPLL4	864 MHz
DPLL5	120 MHz
LPDDR interface	166 MHz (332 MHz actual)
GPMC bus	166 MHz (internal frequency)
System oscillator	26 MHz

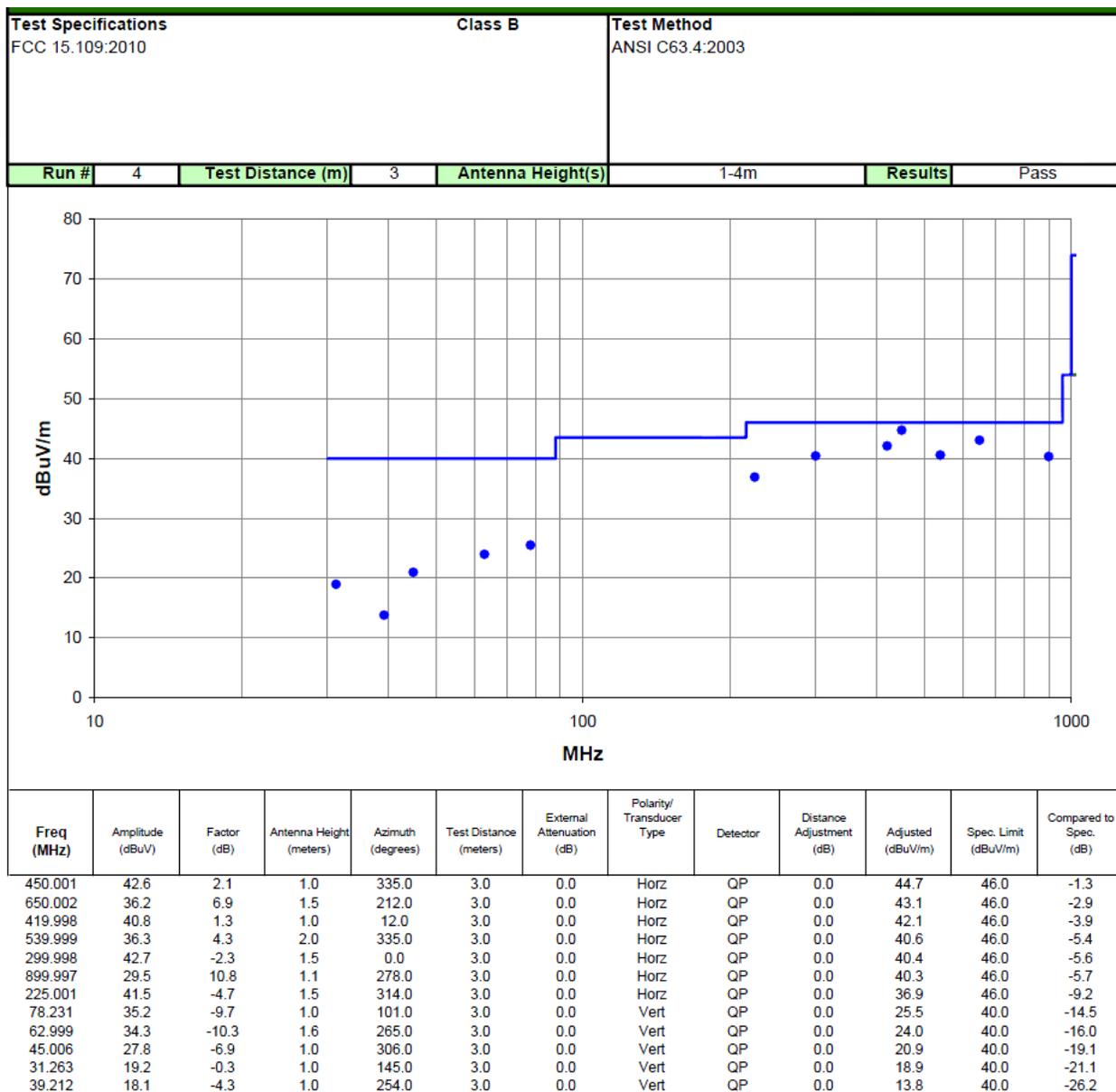


Figure 2.1: Scan Results

3 Summary

These radiated emissions scan provide a baseline for the performance of the AM35x SOM-M2 alone. Radiated emissions testing of a final product designed around the AM35x SOM-M2 is the responsibility of the developer.