

RE: Motorola, Inc., Reply to ATCB Comments 100107

FCC ID: PHX-CPE25100

After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

1) I am still unsure why 10 MHz plots are shown centered on 2499 and 2687 MHz channels if this is not a normal 10 MHz channel per your response. Kindly explain.

Do I need to re-measure the 10 MHz emissions at the band edges? The frequencies that were used to test were chosen to be the same for the 5 MHz and 10 MHz channels only to reduce any confusion that could arise from having to test with a minimum of 6 channels for FCC and an additional 4 for Canada. I believe that the information supplied shows that the transmitter would comply to the emission limits regardless of shifting the transmitter center frequency a couple of MHz.

2) Many of the limits for spurious emissions in both test reports still cite -13 dBm when it appears that -25 dBm is relevant. Please comment.

This product is more suited for the 27.53L(2) classification as a Temporary Fixed device, a desktop device that requires a 120 VAC power source. In addition the antenna is directional which introduces its own set of issues within a mobile application. I was not attempting to have this classified as a "mobile" device, only to show that it complied to the same requirements as a "mobile" device with respect to the emission limits. I had changed the information in the test report to reflect the 27.53L(4) requirements of -13 dBm. The revised information is shown in "5Aa Test Report.pdf" I also uploaded a new ATCB application form indicating the "Temporary Fixed" classification.

3) Note that generally the -13 or -25 dBm limits should utilize the same detectors as required for peak power. If rules specify average power – then average must be used. If rules specify peak power, then peak must be used. Note that radiated and conducted plots appear to utilize average detectors/techniques. However I am inquiring with the FCC to be certain on this aspect. (see attached)

The "5B EMC Test Report" indicates that the radiated signals within 20 dB of the -13 dBm limit are peak measurements. These signals were then verified with generator/antenna substitution as described in TIA-603-C.

The conducted emissions measurements were performed with the same detector as used for power measurements, i.e. "instrumentation calibrated in terms of rms-equivalent voltage".

4) FYI....Regarding the -25 dBm limit. The rule is not clear if the -25 dBm is at the bandedge only, or all spurious emissions. Given the wording, and intent, it would seem this is all spurious emissions. However we are inquiring with the FCC to be certain as well. (see attached)

A resolution to this will be necessary for future submissions, but is not a barrier to the requirements for this specific product.

5) FYI....FCC Permit but Ask inquiry is awaiting final report.

Unless you need to have the 10 MHz bandwidth actually re-measured, I believe the "5Aa Test Report.pdf" is ready for go.