HI Marin

If you have not done so, please upload the revised report to the application filing.

Also, I notice a couple of comments in the email below that need to be addressed.

The responder states that the report needs to say Part 22H . This is not true. This is a part 27 device and it needs to reflect part 27 rules. The problem with the report is that where it should reflect part 27 it gives the wrong section. For example, it references part 27 H which is not correct. The report needs to state the proper Part 27 section involved.

The statement in item 6 is not correct. Please note that while 27.53(g)(1) specifically mentions the emissions just outside the signal the premise is based on the same resolution bandwidth historically allowed by the FCC for OBW measurements. It states "However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power."

What the applicant should remember is that while the FCC can accept any test method they so choose, TCBs are restricted in operation to accept ONLY the test procedures allowed by the FCC and we must follow the FCC training guidelines. Please note that from the beginning of the TCB program the FCC has stated and maintained that Occupied bandwidth measurements, when not so specified in the rule part itself, are to be made with a resolution bandwidth no less than 1% of the occupied bandwidth. This is found in the notes on slide 19 of the 2001 FCC TCB training session and reiterated at all subsequent training sessions. It states. "When the radio service rules don't specify a resolution bandwidth setting the **guideline used is 1% of the occupied bandwidth**. The video bandwidth setting should not be less than the resolution bandwidth setting."

Also, what should be remember is that while newer analyzers have digital technologies that reduce the problem of resolution bandwidth issues, they do not eliminate them. And when these newer analyzers are used to measure OBW, they automatically set the digital filter for resolution bandwidth to the proper values. Consequently the test method cannot be made analyzer specific and must be generic so as to fit all situations. What should also be remembered is that when a typical analyzer uses a resolution bandwidth significantly less than 1% of the OBW the analyzer is not be in the appropriate mode to accurately measure OBW. In order to measure OBW properly, the analyzer needs to be in spectral mode and not line mode. When an analyzers 3dB bandwidth is narrow compared to the frequency spacing of the input signal components the analyzer goes into "line" spectrum mode and is not capable of accurate signal OBW measurements. This is especially true for digital signals such as CDMA, OFDM and others. It is an incorrect assumption that because the resolution bandwidth is narrower it give a 'better picture' of the OBW. This is not true and what is seen is the fact that the analyzer is missing specific spectral content of the signal and thus reducing the measured bandwidth from the actual bandwidth significantly in some cases.

Please remember, that these are certified under FCC rules and established test methods. Please provide data in accordance with Part 27 and the FCC required guidelines stated above (i.e. no resolution bandwidth less than 1% of the signal bandwidth.)

Thanks

Dennis Ward
Director of Engineering