



ENGINEERING AND TESTING FOR EMC AND SAFETY COMPLIANCE

AMCO Automated Systems  
FCC ID: G8JVRT01

- 1) From the original documentation, the transmitter appeared to operate on 1 MHz and less. The new information provided appears to show that the TX operated over 1.5 MHz. Please explain if 15.31(m) should be applied. For example is this capable of being built or used on multiple channels, or is this strictly a tolerance.

Response: The TX would not operate over 1.5MHz per the manufacturer; nonetheless 1.5 MHz represents the frequency tolerance of the transmitter.

- 2) The application is being submitted for a 15.231(e), 414.5 MHz TX. The Quasi-TX state described covers a new frequency range of 420-451 MHz. Therefore this device actually contains a "composite" or multi-band transmitter. Test data has to be supplied for this function since it falls in a different frequency band. Additionally, since this does occur at various "channels" over a band that is > 10 MHz, testing should be performed for a low, middle, and high channel with the channels locked during the test. Also, confirmation via plots must be provided for the actual transmission mode (with normal duty cycle) that shows compliance with the timing requirements of 15.231(e). Alternatively, compliance may be shown with 15.209 without concern for the duty cycle, but should be clearly identified in the report.

Response: The device contains an Automatic Frequency Control (AFC) signal. These signals were considered as a spurious noise and were listed on the table 3-2 of the report. The AFC should not be considered as a second transmitter since there is no antenna connected at the end of the traces, however as a signal which is transmitted through traces and will radiate spurious noise. The duty cycle of the transmitter was used to correct the radiated measurement to compensate for the values by the "inherent" function of the unit.

We hope that these responses have sufficiently answered your questions.

Sincerely,

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