To: FCC OET Laboratory, ATTN Steve Martin

From: CURRENT Technologies

Regarding: Correspondence 31238, FCC ID TY7210-0137-0001, EA209982

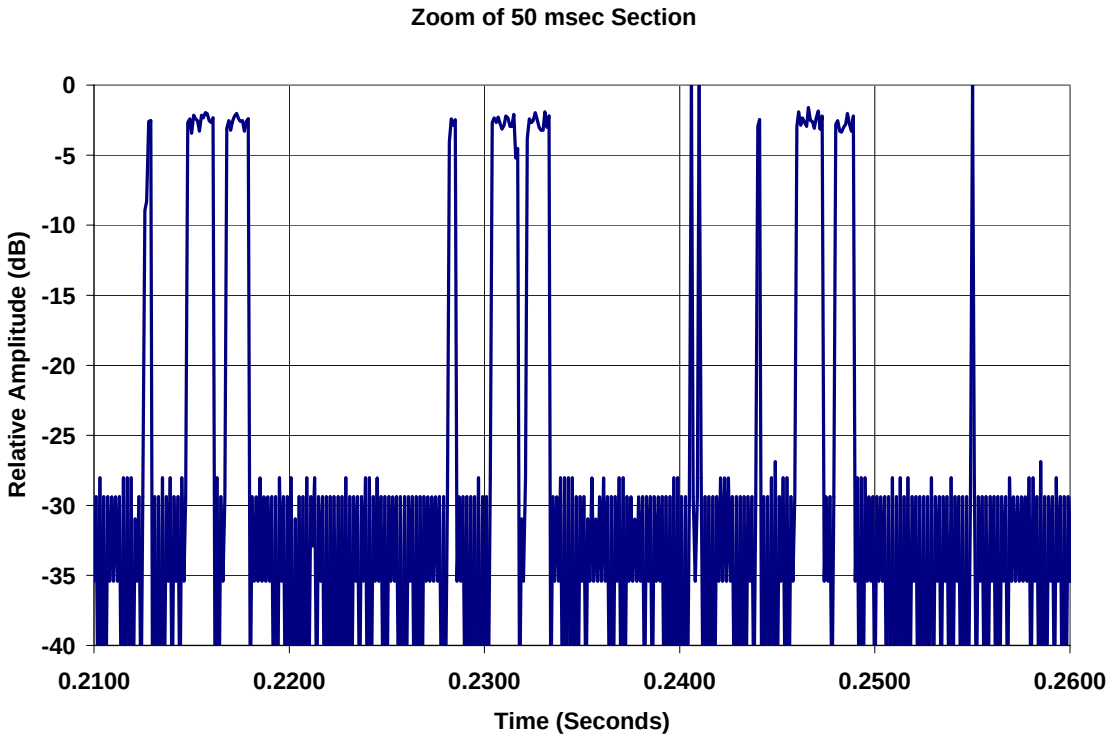
The correspondence noted above raised the following question:

> **Please provide quantitative measurement of RF injection duty factor achieved during testing.**

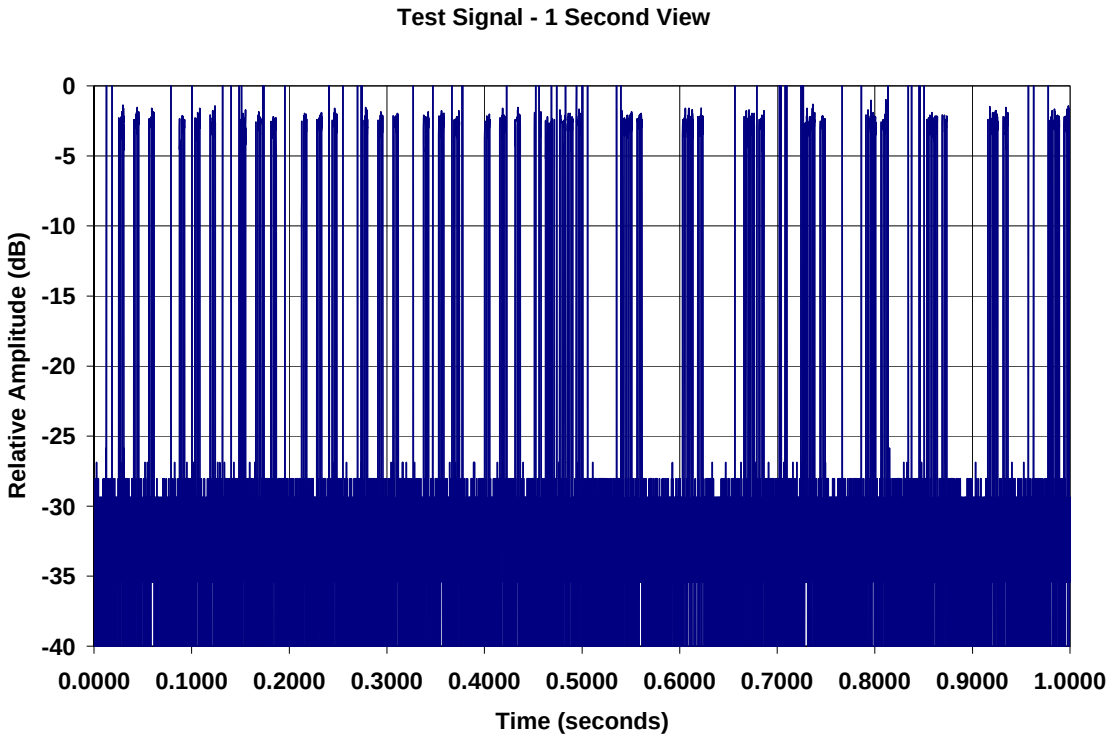
As noted in the Report of Measurements, the stimulus signal was

> fping [destination IP address] –s 900 –c –t 50 –w 200

This command creates a 900 byte ping every 50 ms. Several instances of this ping are used in testing to increase the burst rate of the signal and to fully exercise the quasi-peak detector. The graphs below show the result of using this stimulus. (These results show only the original transmitted signal, not the echo return. This was accomplished by attenuating the return signal so it fell within the noise on the scope.) The first graph shows a 50 ms portion of the stimulus signal.



The individual bursts can be clearly seen in this view, with six data burst. (The shorter system overhead transmissions are also visible.) Each of the data bursts are approximately 1.4 ms, and therefore fully exercise the rise time of quasi-peak detection filter, thereby ensuring that the quasi-peak measurement will register the maximum emissions.



The repeated bursts ensure that the quasi-peak filter decay constant is not allowed to fully discharge, thereby ensuring that the measurement will register the maximum possible emissions as called out in Appendix C.