

NAME OF TEST: Transient Frequency Behavior

SPECIFICATION: 47 CFR 90.214

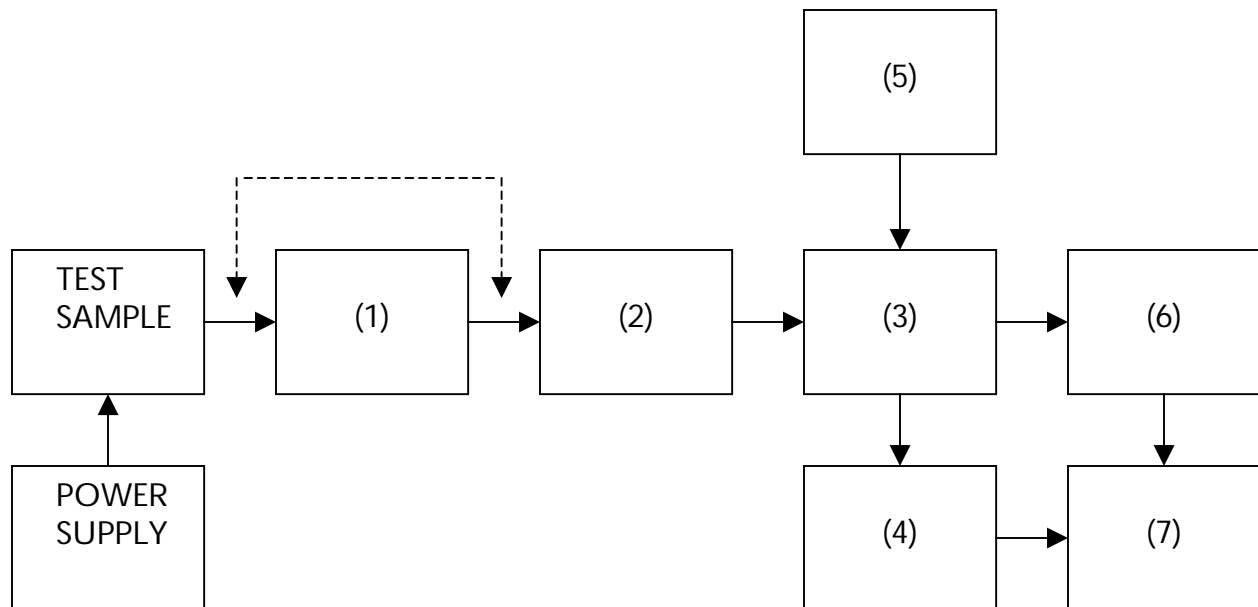
GUIDE: ANSI/TIA/EIA-603-1992, Paragraph 2.2.19

TEST EQUIPMENT: As per attached page

#### MEASUREMENT PROCEDURE

1. The EUT was setup as shown on the attached page, following TIA/EIA-603 steps a, b, and c as a guide.
2. The transmitter was turned on.
3. Sufficient attenuation was provided so that the transmitter carrier level measured at the output of the combiner was 40 dB below the maximum input level of the test receiver. This level was recorded as step f.
4. The transmitter was turned off.
5. An RF signal generator (1) modulated with a 1 kHz tone at either 25, 12.5, or 6.25 kHz deviation, and set to the same frequency as the assigned transmitter frequency, (2) was adjusted to a level -20 dB below the level recorded for step f, as measured at the output of the combiner. This level was then fixed for the remainder of the test and is recorded at step h.
6. The oscilloscope was setup using TIA/EIA-603 steps j and k as a guide, and to either 10 ms/div (UHF) or 5 ms/div (VHF).
7. The 30 dB attenuator was removed, the transmitter was turned on, and the level of the carrier at the output of the combiner was recorded as step l.
8. The carrier on-time as referenced in TIA/EIA-603 steps m, n, and o was captured and plotted. The carrier off-time as referenced in TIA/EIA-603 steps p, q, r, and s was captured and plotted.

## TRANSIENT FREQUENCY BEHAVIOR



(1) ATTENUATOR (Removed after first step)  
i00112 HP 30 dB

(2) ATTENUATOR  
i00122 HP 10 dB

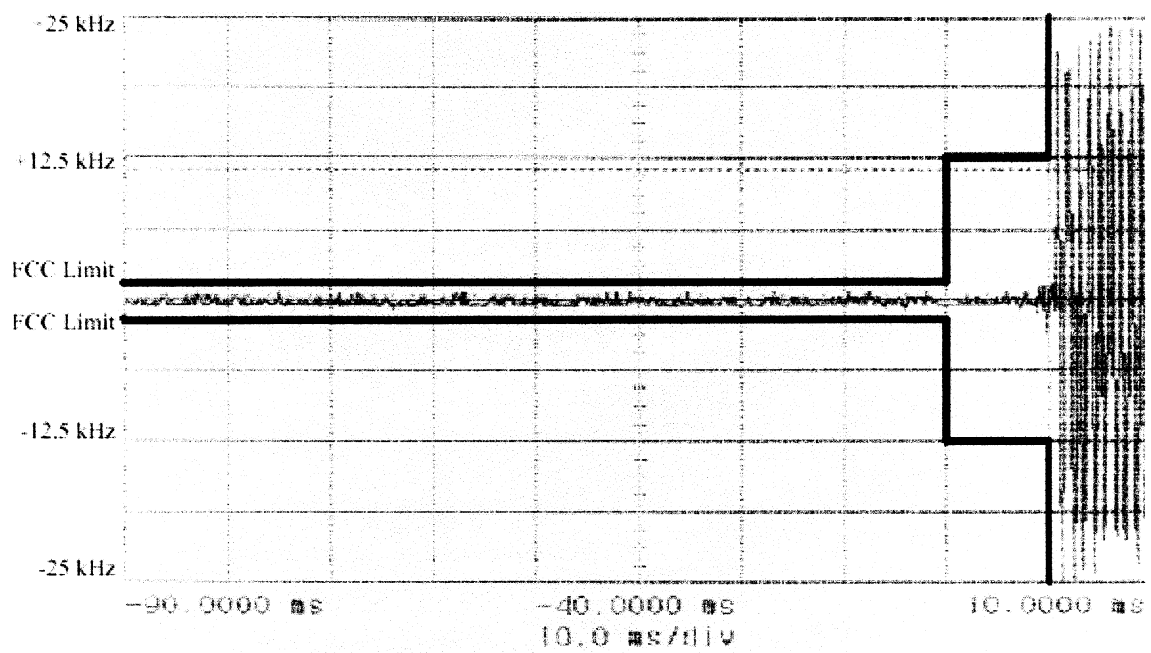
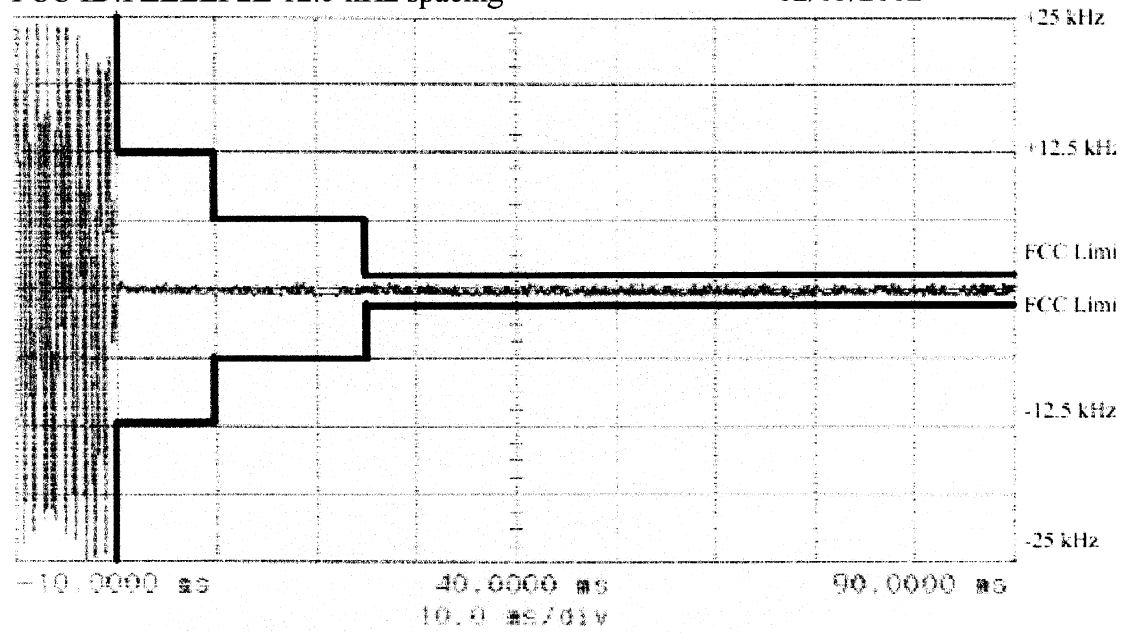
(3) COMBINER  
i00154 4 x 25 K Combiner

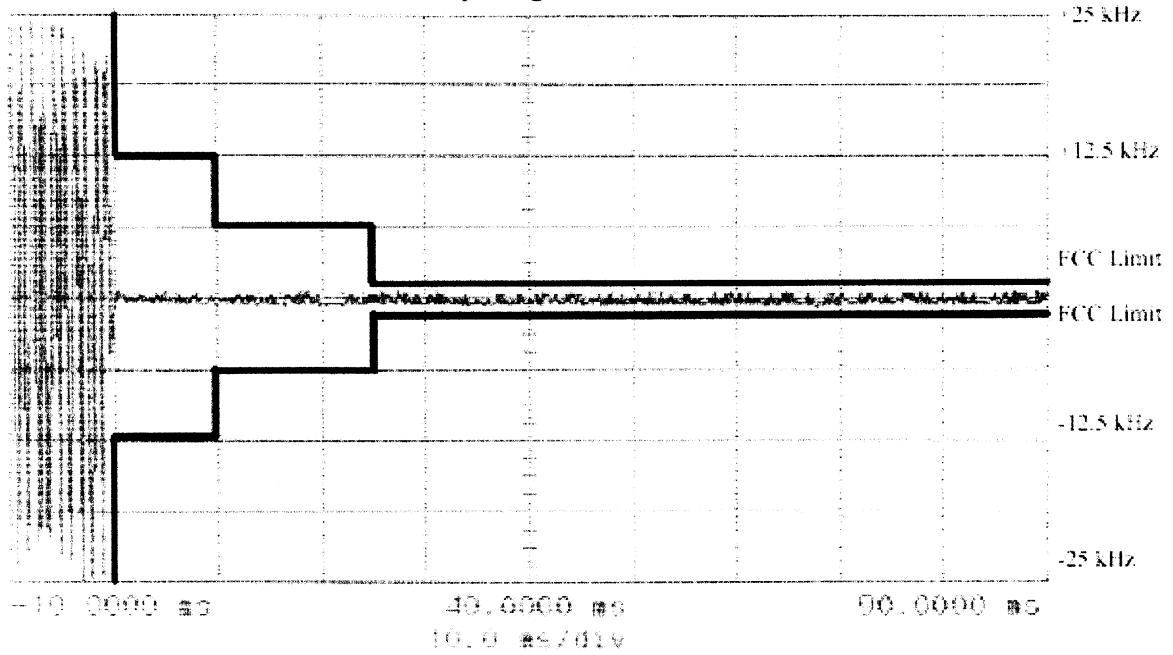
(4) CRYSTAL DETECTOR  
i00159 HP 8470B

(5) RF SIGNAL GENERATOR  
i00067 HP 8920A

(6) MODULATION ANALYZER  
i00020 HP 8901A

(7) SCOPE  
i00030 HP 54502A





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