

NAME OF TEST:

Transmitter Spurious Emissions at Antenna Terminal

RULE PART NUMBER: 2.1051,90.543(c)

MINIMUM STANDARD: 90.543(c): $43 + 10 \log_{10}(P \text{ (Watts)})$
For 5Watt \Leftrightarrow 50dBc ; For 1 Watt \Leftrightarrow 43 dBc

TEST RESULTS: Meets minimum standard (see plots on the following page)

TEST CONDITIONS: Standard Test Conditions, 25 C

RF voltage measured at antenna terminals

TEST PROCEDURE: TIA/EIA - 603, 2.2.13

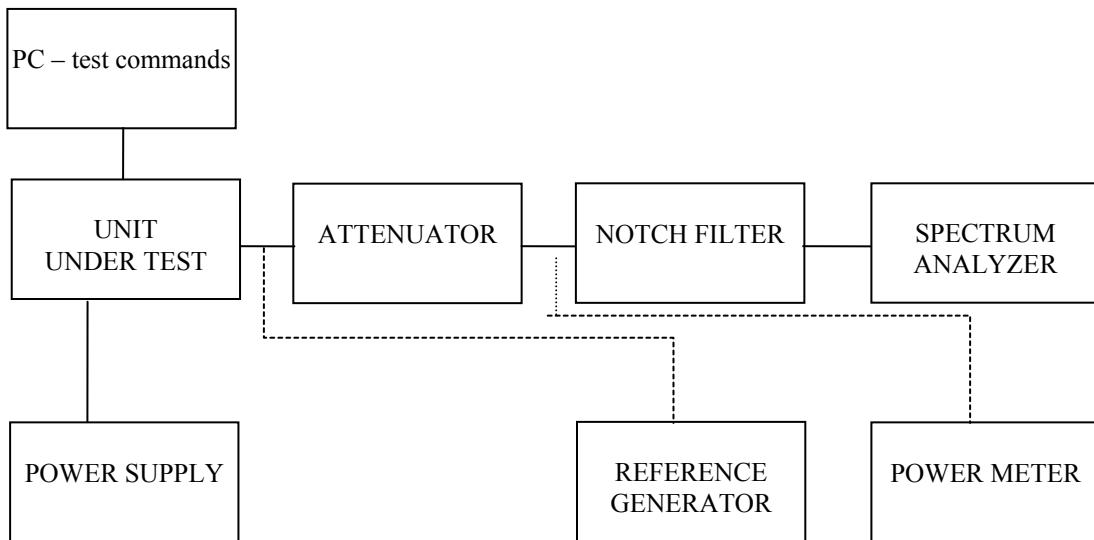
TEST EQUIPMENT: Attenuator, BIRD Model / 50-A-FFN-03 / 3 dB / 150 Watt
DC Power Source, Model Astron VLS35M
Notch filter calibrated before test
Spectrum Analyzer, Model HP8563E
Reference Generator, Model IFR 930A

PERFORMED BY:

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Date: May 7, 2004

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NAME OF TEST: Transmitter Spurious and Harmonic Outputs
(Continued)

MEASUREMENT PROCEDURE:

1. The transmitter carrier output frequency is 770.0750 MHz. The reference oscillator frequency is 12.8 MHz.
2. After carrier reference was established on spectrum analyzer, the notch filter was adjusted to null the carrier Fc to extend the range of the spectrum analyzer for harmonic measurements.
3. At each spurious frequency, Generator substitution was used to establish the true spurious level.
4. The spectrum was scanned to the 10th harmonic.

TEST DATA:

Power (W):	5	W	Min Spec:	-50	dBc
Power (dBm):	37	dBm	Worse Spur:	-83.1	dBc
Freq (MHz):	770.075	MHz			
		Spec An	Loss	dBm	dBc
2	1540.150	-47.2	1.1	-46.1	-83.1
3	2310.225	-74.0	4.0	-70.0	-107
4	3080.300	-94.0	10.6	-83.4	<-100
5	3850.375	-97.3	18.9	-78.4	<-100
6	4620.450	-104.0	10.4	-93.6	<-100
7	5390.525	-101.0	19.3	-81.7	<-100
8	6160.600	NF	5.9	<-80	<-100
9	6930.675	NF	34.8	<-80	<-100
10	7700.750	NF	19.7	<-80	<-100

NF↔noise floor –115dBm