

Radio Equipment / Radio Device Checklist

The following is an assortment of questions and needs prior to evaluation. This is not to be considered exhaustive, and further questions may arise.

If testing is required, RTL will need the following items:

We request at least two samples of the EUT in case problems during testing.

For **site** measurements, we will require all accessories (i.e. all manufacturer supplied antennas, microphones or speaker-mics, battery configurations, hearing aid loops, headsets, etc.).

For **bench** testing,

Attach RF measurement equipment in place of an antenna. If the EUT uses a unique connector then it is the responsibility of the applicant to provide an adapter.

Attach external power supply in place of any batteries.

Make provisions for external keying of the transmitter.

Make provisions for supplying an external audio connection.

Make provisions for an external audio output.

We will need to easily and repeatably:

Change the frequency to a low, middle and high channel for each band the device operates.

Change the power setting to the lowest and highest powers available.

Change the bandwidth (i.e. 25k, 12.5k, etc.).

Enable/disable any each modulation type (i.e. voice, digital, ST, SAT).

Be sure to provide any test fixtures necessary to operate the equipment, including software if needed to change/program the operating parameters during testing as well a method of recharging any batteries.

Please provide systematic instructions for operating any software-controlled radios.

If the EUT will not recall the last settings after the power is cycled off-on, then have it return from a power off state ready to transmit at high power on mid-band frequency.

The following questions will allow RTL to begin assessing your radio frequency device. Be sure answers relate to the modes that are to be approved. If you do not know, leave it blank, and we will make our best effort to determine the proper response.

DESCRIPTION	
What is the applicant's name, address, phone, fax, e-mail address	
Listed correctly in FCC database?	
Model number	
What trade name will the product be marketed under?	
FCC ID	
P.O. Number	
Equipment description	VHF/UHF FM/AM/SS/other Licensed/unlicensed transmitter?
For unlicensed equipment, has radiated emissions data been taken on a listed site?	
Technical contact person	Name, phone number, fax number, email:
If failures are encountered during testing, should RTL:	Advise client, and hold on all further testing Advise client, and continue with remaining tests other:
SPECIFICATIONS	
What FCC rules do you want the equipment tested to?	
Is this a Permissive change?	No / Yes: class-1 / Yes: Class -2. Original FCC ID?
What IC (Canada) rules do you want the equipment tested to?	RSS -118/-119/-210/ -other
Does routine environmental assessment (MPE/SAR) apply?	
What other rules do you want the equipment tested to?	
Necessary Bandwidth: 2M+2DK, 99.75% Power BW, other	

EQUIPMENT	
Operating voltage, Vdc	
Operating frequency, Hz (AC devices only)	
Uses a battery charger?	YES/NO
Operating Location Professional installation?	Table Top, Floor/Ground, Wall, Handheld, Vehicle, in a host, Roof,
TRANSMITTER	
Is a transmitter to be tested?	Yes / No
Emission Designators: Voice? Data? Scrambling? Encryption?	
Maximum allowed modulation, kHz	
Maximum allowed deviation, kHz	
Necessary Bandwidth, kHz	
1 st modulation scheme	FM/6.25k,FM/12.5k,FM/25k,FM/30k,FM/AMPS,AM/SSB,AM/DSB,SS/DIRECT,SS/HOPPER,SS/HYBRID,TDMA,CDMA,GSM,OTHER:
2 nd modulation scheme	FM/6.25k,FM/12.5k,FM/25k,FM/30k,FM/AMPS,FM/NAMPS,AM/SSB,AM/DSB,SS/DIRECT,SS/HOPPER,SS/HYBRID,TDMA,CDMA,GSM,OTHER:
Allowed frequency tolerance ppm, Hz, %, other	
Power range, Watts (rated) Conducted/ ERP/ EIRP	
Allowed maximum power, Watts (from 47CFR rule section)	
Power adjustment type	N/A , Variable, Switchable
Antenna gain, dBi	
Maximum number of channels	
Frequency range(s), MHz	
Tuned frequencies (we need a middle channel for each band)	
Is there a microphone or audio input	Yes/no
Is there a modem or data input port	Yes/no
Is a low pass filter required?	Yes/no
RECEIVER	
Is a receiver to be tested?	Yes /No
Is a receiver associated with a transmitter subject to Verification or Declaration of	

Conformity?	
Receiver description	Superregenerative, Superhetrodyne, Other: ?
Maximum channels (if different from transmitter)	
Frequency range(s), MHz (if different from transmitter)	
Tuned frequencies (if different from transmitter)	need a low, middle, and high frequency for each band
IFs, MHz	
Injection	Low side / High side / Zero IF?
Oscillator range, MHz	
Does the EUT scan any bands other than those in which it transmits? If so, receiver Certification may apply	Yes / No
Audio power, Watts (rated)	
Audio impedance, Ohms	
Audio distortion, % (rated)	

ACCESSORIES				
#	Type	Model	Serial	FCC ID
1				
2				
3				
4				
5				
6				
7				

Type = Exciter, Amplifier, Computer, Monitor, Keyboard, Mouse, Printer, etc.

CABLES					
#	Type	Length, m	Shield	Metallic hood	Ferrite
1			Yes / No	Yes / No	Yes / No
2			Yes / No	Yes / No	Yes / No
3			Yes / No	Yes / No	Yes / No
4			Yes / No	Yes / No	Yes / No
5			Yes / No	Yes / No	Yes / No
6			Yes / No	Yes / No	Yes / No
7			Yes / No	Yes / No	Yes / No