

8 OUTPUT POWER MEASUREMENT

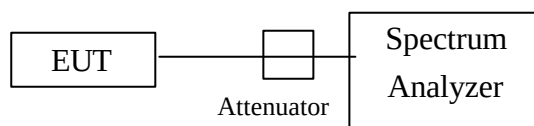
8.1 Standard Applicable

For direct sequence system, according to 15.247(b), the maximum peak output power of the transmitter shall not exceed 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 5 without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz and VBW to 1 MHz.
4. Use channel power function and record the level displayed.
5. Repeat above procedures until all frequencies measured were complete.

Figure 5: Output power and measurement configuration.



8.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Next Cal. Due
RF Test Receiver	Rohde & Schwarz	ESBI	05/31/2004
Plotter	Hewlett-Packard	7440A	N/A
Attenuator	Weinschel Engineering	AS3667	N/A

8.4 Measurement Data

Test Date : Oct. 06, 2003 Temperature : 25 °C Humidity: 60 %

- a) Channel 01 : Output Peak Power is 14.9 dBm or **30.00mW**
- b) Channel 06 : Output Peak Power is 15.0 dBm or **31.62mW**
- c) Channel 11 : Output Peak Power is 14.1 dBm or **25.70mW**

Note : 1. Please see appendix 3 for Plotted Data

2. The expanded uncertainty of the output power tests is 2dB.