

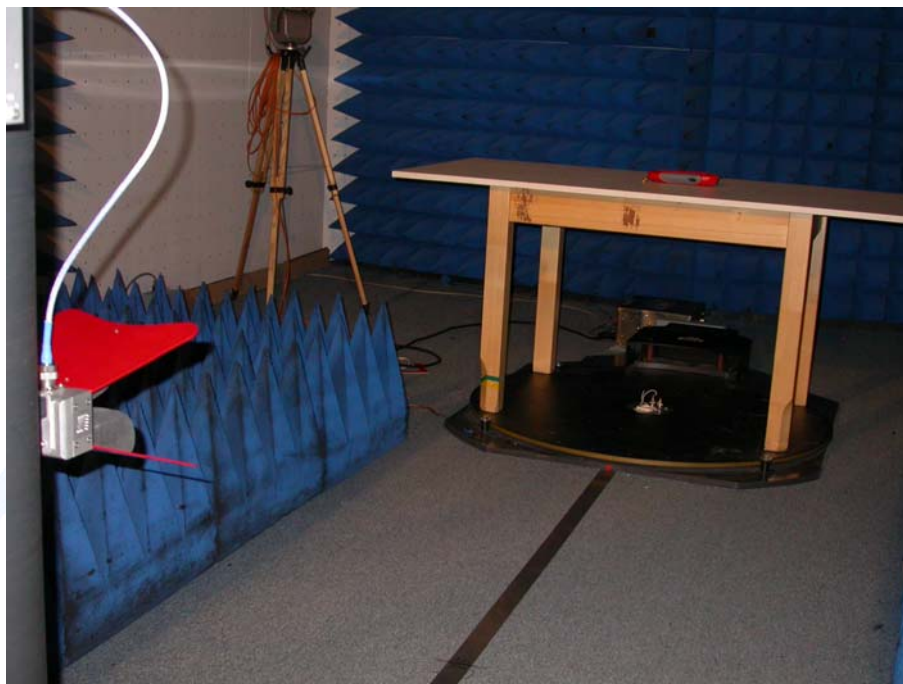
5.2 Maximum output power radiated

For test instruments and accessories used see section 6 Part CPR 3.

5.2.1 Description of the test location

Test location: Anechoic Chamber A2

5.2.2 Photo documentation of the test set-up



5.2.3 Applicable standard

According to FCC Part 15C, Section 15.247(b)(1, 2):

The maximum peak output power of an intentional radiator shall not exceed the limit defined in dependency of the channel separation and of the number of hopping channels.

5.2.4 Description of Measurement

The transmitter output was measured radiated using a spectrum analyser. The center frequency of the spectrum analyser is set to the fundamental frequency. The span of the spectrum analyser should be larger than the emission bandwidth (EBW). The channel bandwidth has been set to the total emission band. With Peak detector and Power Mode "Max Hold" the result is the summed maximum output power of the emission band. To determine the maximum output power the maximum power setting is used independent of the antenna gain of the internal antenna. The absolute maximum peak output power is displayed on analyser because a transducer factor takes into account all losses and amplifications on the signal way.

Spectrum analyser settings:

RBW: 1 MHz
Detector: Peak
Power Mode: Max. Hold

VBW: 10 kHz
Sweep time: auto
Channel bandwidth: 1 MHz

5.3 Spurious emissions

For test instruments and accessories used see section 6 Part **SER 2**, **SER 3**.

5.3.1 Description of the test location

Test location: OATS1
Test location: Anechoic Chamber A2

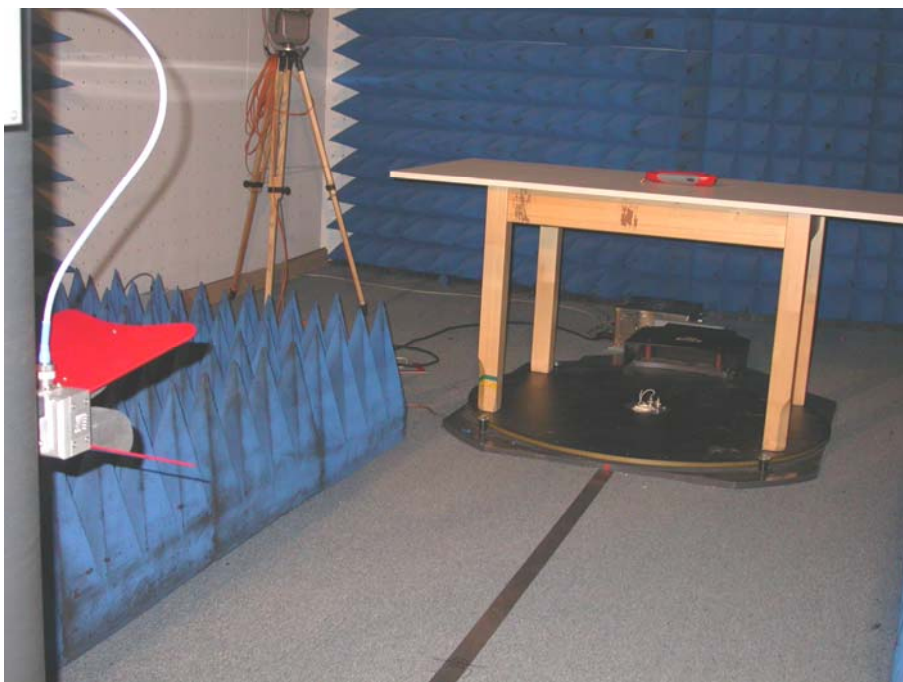
Test distance: 3 metres

5.3.2 Photo documentation of the test set-up

Open area test site



Anechoic chamber



5.3.3 Applicable standard

According to FCC Part 15, Section 15.247(d):

In any 100 kHz bandwidth outside the frequency bands 2400 – 2483.50 MHz and 5725 – 5850 MHz, the digitally modulated radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or an radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limit specified in Section 15.209(a) (see Section 15.205(c)).

5.3.4 Description of Measurement

Radiated spurious emissions from the EUT are measured in the frequency range of 30 MHz to 1000 MHz using a tuned receiver and appropriate broadband linear polarized antennas. The measurements are made with 120 kHz bandwidth and quasi-peak detection. The EUT is placed on a 1.0 X 1.5 m non-conducting table 80 cm above the ground plane. The set up of the equipment under test will be in accordance to ANSI C63.4. To locate maximum emissions from the EUT the antenna is shifted in height from 1 to 4 m, after the EUT is rotated 360 degrees. The measurement scan is made in horizontal and vertical polarization of the antenna.

For the radiated measurement up from 1 GHz to maximum frequency as specified in Section 15.33, a spectrum analyser and appropriate linear polarized antennas are used. The set up of the EUT will be in accordance to ANSI C63.4. To locate maximum emissions the EUT was rotated 360 degrees in the fully anechoic chamber. The measurement scan is made in horizontal and vertical polarization of the antenna.

Spectrum analyser settings:

RBW: 1 MHz
Detector: Max peak
Sweep: Auto

VBW: 3 MHz
Trace: Max. hold