

FCC ID: SP3-02201000

Position of the EUT:



5.2.1 Applicable standard

According to FCC Part 15C, Section 15.231(b):
The field strength of emissions from intentional radiators shall not exceed the effective field strength limits.

5.2.2 Description of Measurement

The radiated power of the fundamental wave from the EUT is measured as described under item 4.4.3. The set up of the EUT is in accordance to ANSI C63.4. The measurement has been performed in unmodulated TX mode at normal conditions.

5.2.3 Test result

| Frequency (MHz) | Level Pk (dBμV) | Duty cycle corr. (dB) | Correct. factor (dB/m) | Corrected level dB(μV/m) | Limit dB(μV/m) | Delta (dB) |
|-----------------|-----------------|-----------------------|------------------------|--------------------------|----------------|------------|
| 314.6 | 73.8 | -17.0 | 17.3 | 74.1 | 75.6 | -1.5 |
| 315.0 | 73.7 | -17.0 | 17.3 | 74.0 | 75.6 | -1.6 |

Limit according to FCC Section 15.231(b):

| Frequency (MHz) | Field strength of fundamental @ 3m | | Effective limit for 315 MHz | |
|-----------------|------------------------------------|-----------------|-----------------------------|----------|
| | (μV/m) | dB(μV/m) | (μV/m) | dB(μV/m) |
| 260 - 470 | 3750 to 12500)* | 71.4 to 81.9)* | 6042 | 75.6 |

*Linear interpolation

The requirements are **FULFILLED**.

Remarks:

5.3 Spurious emissions (magnetic field) 9 kHz – 30 MHz

For test instruments and accessories used see section 6 Part SER 1.

5.3.1 Description of the test location

Test location: OATS1

Test distance: 3 metres

5.3.2 Photo documentation of the test set-up



5.3.3 Applicable standard

According to FCC Part 15C, Section 15.209:

The emissions from intentional radiators shall not exceed the effective field strength limits.

5.3.4 Description of Measurement

The magnetic field strength from the EUT will be measured in an open area test site in the frequency range of 9 kHz to 30 MHz using a tuned receiver and a shielded loop antenna. The set up of the Equipment under test will be in accordance to ANSI C63.4. In the case where larger measuring distances are required the results will extrapolated based on the values measured on the closer distances according to Section 15.31(f)(2)(2). The final measurement will be performed with an EMI Receiver set to Quasi Peak detector except for the frequency bands 9 kHz to 90 kHz and 110 to 490 kHz where an average detector will be used according to Section 15.209(d)(2).

Instrument setting:

9 kHz – 150 kHz: RBW: 200 Hz

150 kHz – 30 MHz: RBW: 9 kHz

5.4 Spurious emissions radiated (electric field)

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

5.4.1 Description of the test location

Test location: OATS1
Test location: Anechoic Chamber A2
Test distance: 3 metres

5.4.2 Photo documentation of the test set-up



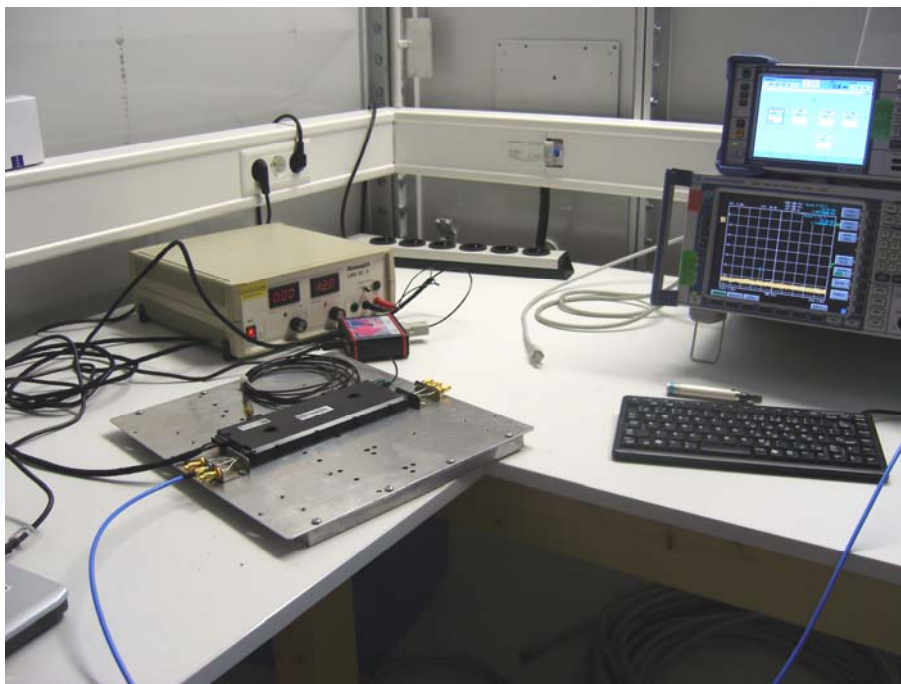
5.5 Correction for pulse operation (duty cycle)

For test instruments and accessories used see section 6 Part DC.

5.5.1 Description of the test location

Test location: AREA4

5.5.2 Photo documentation of the test set-up



5.5.3 Applicable standard

According to FCC Part 15C, Section 15.35(c):

The emissions from intentional radiators shall not exceed the effective field strength limits.

5.5.4 Description of Measurement

The duty cycle measurement is performed using an arbitrary waveform generator and an RF-Generator as stimulus for the receiver. The spectrum analyser displays the puls train in zero span mode. The EUT is only able to send the right puls train in normal mode. The stimulus shall provide with the shortest reaction possible for this programmed puls train. The puls train have two main pulses, a "button pressed acknowledge puls" and a "button released acknowledge puls". The puls train is programmed for CH1 and CH2 as "button pressed puls" (9 ms) + min blank time (45 ms) + "button released telegram" (37 ms) + blank time (4 ms) + "button released acknowledge puls" (9 ms). The puls train is recorded. Other usable remote controller show the same behaviour as below described, the difference between the remote controllers is the Byte "Mode only".