

5 TEST CONDITIONS AND RESULTS

5.1 AC power line conducted emissions

For test instruments and accessories used see section 6 Part A 4.

5.1.1 Description of the test location

Test location: Shielded Room S2

5.1.2 Photo documentation of the test set-up



5.1.3 Applicable standard

According to FCC Part 15, Section 15.207(a):

Except as shown in paragraphs (b) and (c) of this Section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the given limits.

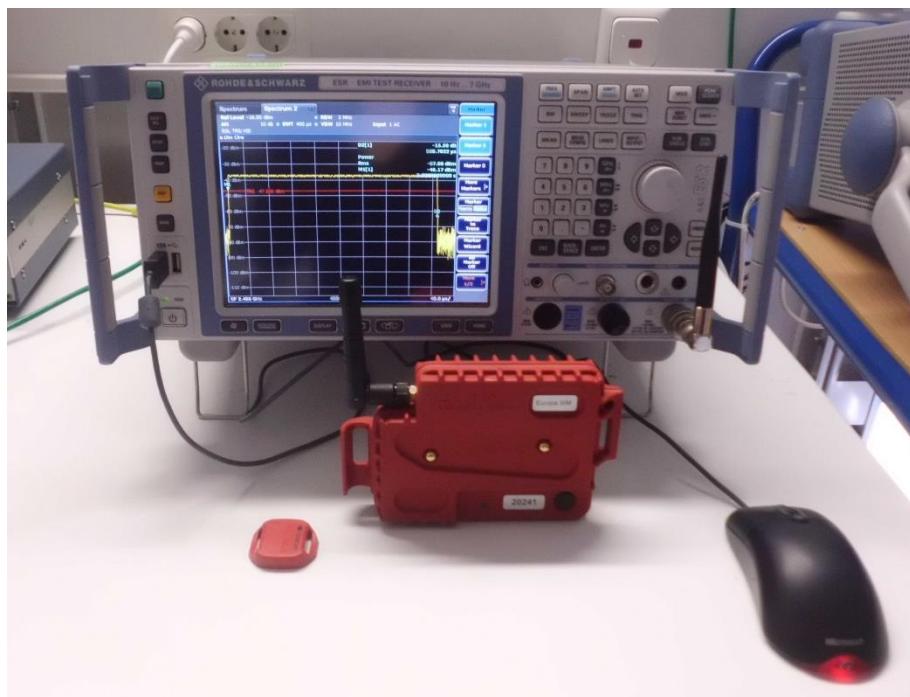
5.2 Correction for pulse operation (duty cycle)

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

5.2.1 Description of the test location

Test location: AREA4

5.2.2 Photo documentation of the test set-up



5.2.1 Applicable standard

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

When the radiated emission limits are expressed in terms of average value and pulsed operation is employed, the measurement power shall be determined by averaging over one complete puls train, including blanking intervals, as long as the pulse train does not exceed 0.1s. In cases where the puls train exceeds 0.1s, the measured power shall be determined from the average absolute voltage during a 0.1s interval during which the power is at its maximum. The exact method of calculating the average power shall be submitted.

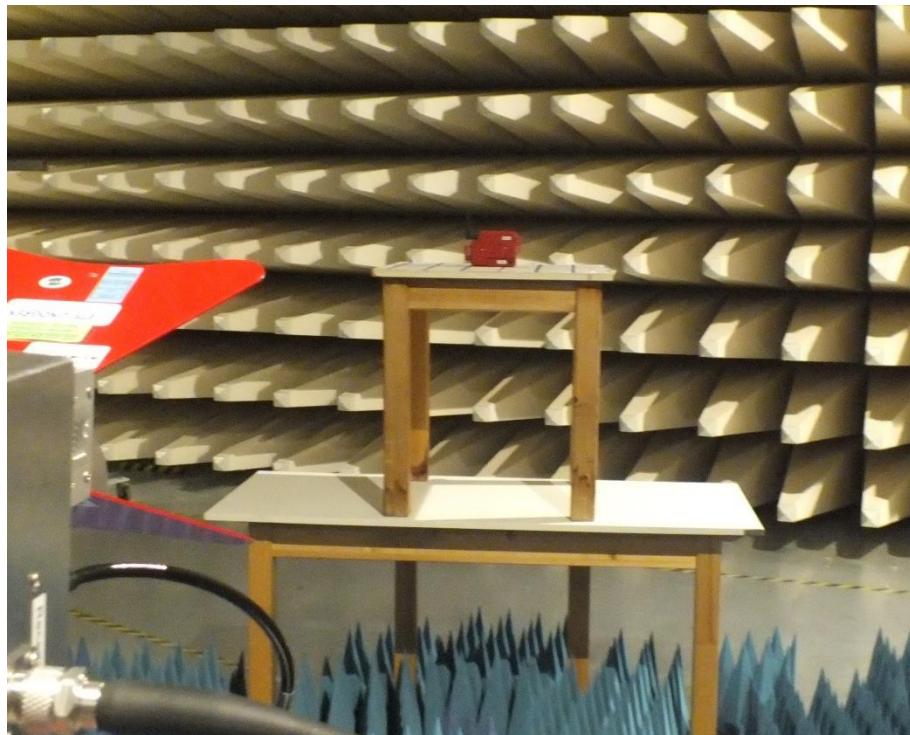
5.3 Field strength of fundamental

For test instruments and accessories used see section 6 Part **FS 1-18 GHz**.

5.3.1 Description of the test location

Test location: Anechoic chamber 1
Test distance: 3 m

5.3.2 Photo documentation of the test set-up



5.3.3 Applicable standard

According to FCC Part 15C, Section 15.249(a):

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the effective limits.

5.4 Out-of-band emission, radiated

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

5.4.1 Description of the test location

Test location: OATS 1
Test location: Anechoic chamber 1

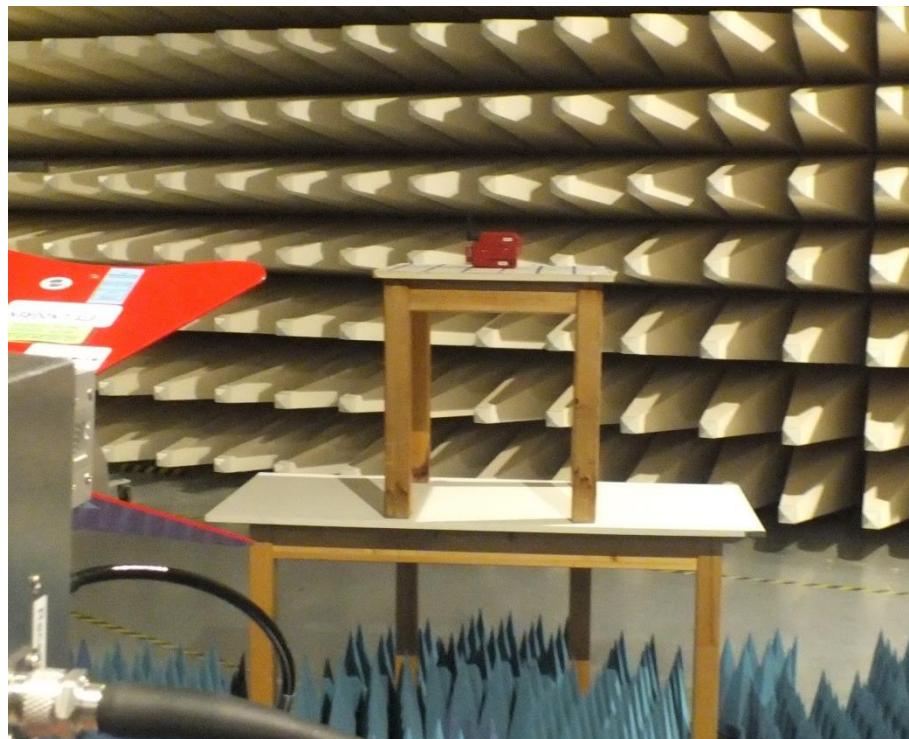
Test distance: 3 m

5.4.2 Photo documentation of the test set-up

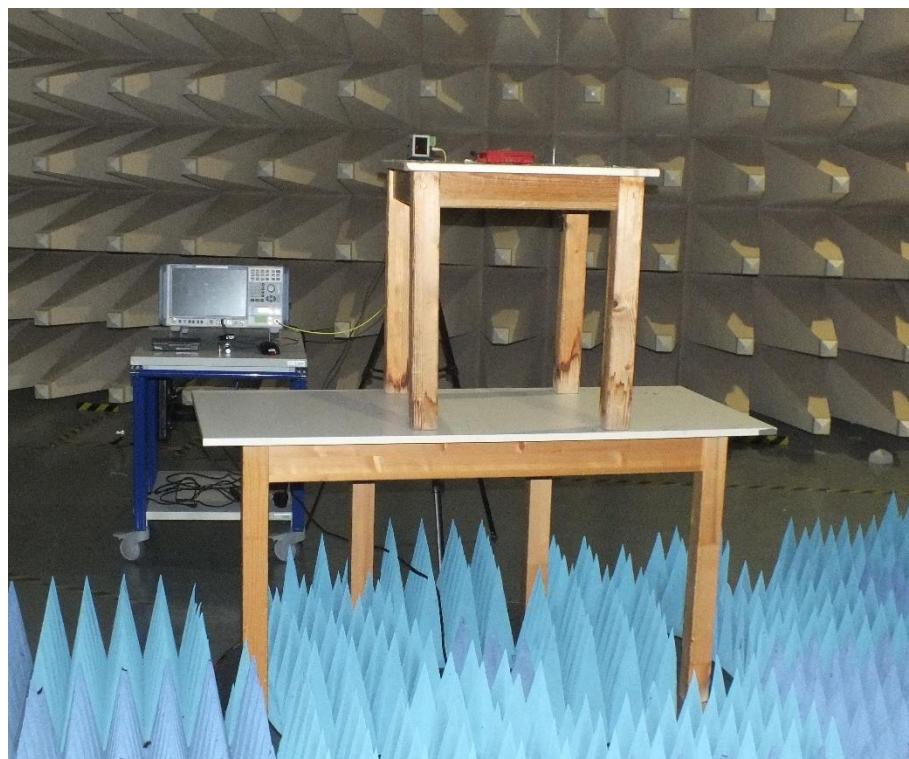
Test setup 30 MHz – 1000 MHz:



Test setup 1 GHz – 18 GHz:



Test setup 18 GHz – 25 GHz:



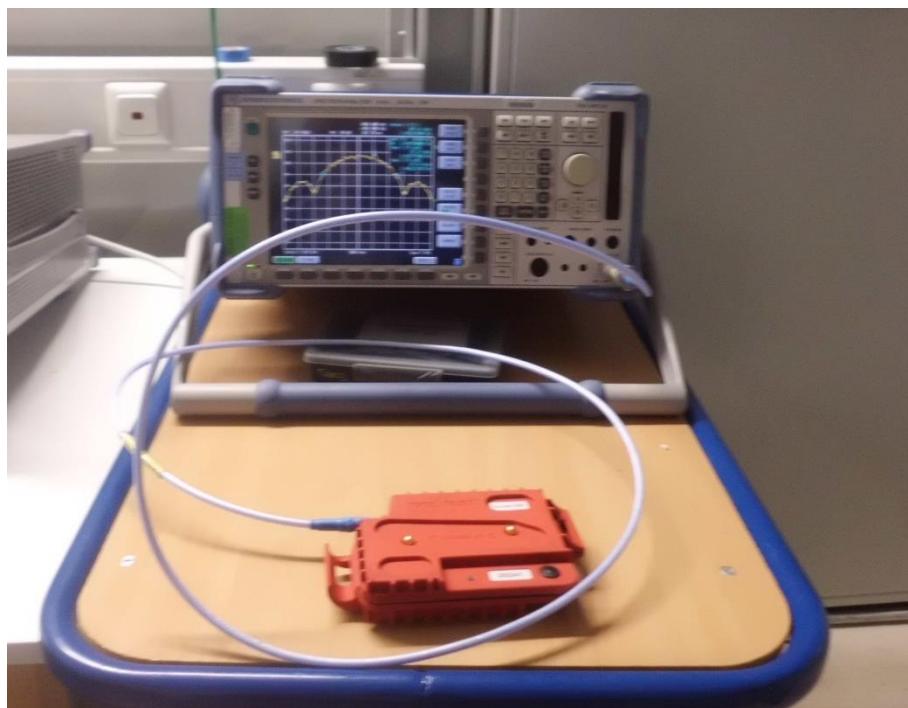
5.5 EBW and OBW

For test instruments and accessories used see section 6 Part **MB**.

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 15, Section 15.215(c):

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in Section 15.217 through Section 15.257, must be designed to ensure that the 20 dB bandwidth of the emission is contained within the frequency band designated in the rule section under which the equipment is operated.

5.5.4 Description of Measurement

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio of -20 dB (99%). The x-dB-down (OBW) function of the analyser is used. The measurement is performed with normal modulation in TX continuous mode.

Spectrum analyser settings:

RBW: 100 kHz, VBW: 300 kHz, Span: 5 MHz, Trace mode: max. hold, Detector: max. peak;