

5 TEST CONDITIONS AND RESULTS

5.1 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 15C, 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 limits in the following table.

	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency



5.2 Undesirable emissions

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

5.2.1 Description of the test location

Test location: OATS 1

Test location: Anechoic chamber 1

Test distance: 3 m

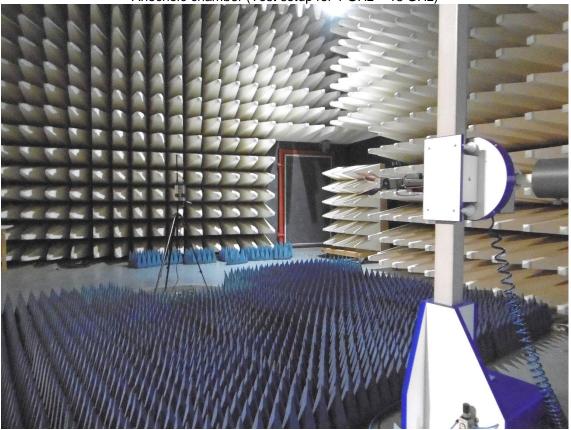
5.2.2 Photo documentation of the test set-up

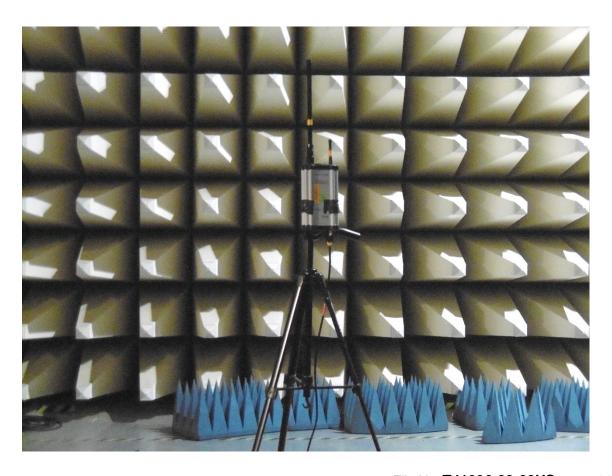
Open area test site (Test setup for 30 MHz – 1000 MHz)





Anechoic chamber (Test setup for 1 GHz – 18 GHz)







Anechoic chamber (Test setup for 18 GHz – 40 GHz)



5.2.3 Applicable standard

According to FCC Part 15E, Section 15.407(b):

For transmitters operating in the defined bands shall not exceed the appropriate emission limit outside of the operating bands.

In addition, radiated emissions which fall in the restricted bands, as defined in Section15.205(a), must also comply with the radiated emission limit specified in Section15.209(a) (see Section15.205(c)).

5.2.4 Description of Measurement

Undesirable emissions are measured using a spectrum analyser and following the procedures according the KDB 789033, item H. If the emission level of the EUT in peak mode complies with the average limit then testing will be stopped and peak values of the EUT will be reported, otherwise, the emission will be measured in average mode again and reported. Up from 7.5 GHz a HP filter is used.

Spectrum analyser settings for peak values:

RBW: 1 MHz, VBW: 3 MHz, Sweep: Auto, Trace mode: max hold;

Spectrum analyser settings for average values:

RBW: 1 MHz VBW: 3 MHz Detector: RMS, Sweep: 100 ms, Trace mode: max hold;