

## **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: AREA4

#### **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.

#### **5.1.4 Description of Measurement**

The measurements are performed following the procedures set out in ANSI C63.4 described under item 4.4.3. If the minimum limit margin appears to be less than 20 dB with a peak mode measurement, the emissions are remeasured using a tuned receiver with quasi-peak and average detection and recorded on the data sheets.

#### **5.1.5 Test result**

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin dB at MHz

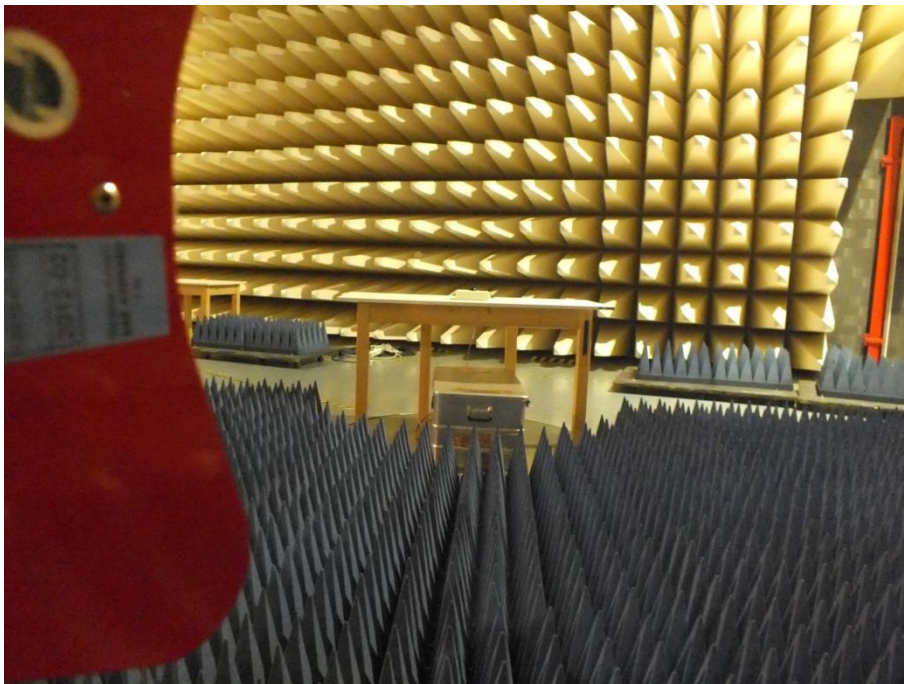
## 5.2 Field strength of fundamental

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

### 5.2.1 Description of the test location

Test location: Anechoic chamber 1  
Test distance: 3 m

### 5.2.2 Photo documentation of the test set-up



### 5.2.1 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.

### 5.2.2 Description of Measurement

The radiated emission of the fundamental wave from the EUT is measured using a spectrum analyser and appropriate linear polarized antennas. The set up of the EUT and the measurement procedure is in accordance to ANSI C63.10, Item 6.5. The EUT is measured in TX continuous mode modulated under normal conditions.

Analyser settings:

Peak measurement: RBW: 3 MHz

VBW: 10 MHz

Detector: Max peak

### 5.3 Out-of-band emission, radiated

For test instruments and accessories used see section 6 Part **SER1**, **SER 2**, **SER 3**.

#### 5.3.1 Description of the test location

Test location: OATS 1  
Test location: Anechoic chamber 1

Test distance: 3 m

#### 5.3.2 Photo documentation of the test set-up

Test setup 30 MHz – 1000 MHz:



Test setup 1 GHz – 18 GHz:





## 5.4 EBW and OBW

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

### 5.4.1 Description of the test location

Test location: AREA4

### 5.4.2 Photo documentation of the test set-up



### 5.4.3 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.

### 5.4.4 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: 30 kHz, VBW: 100 kHz, Span: 3 MHz, Trace mode: max. hold, Detector: max. peak;