

5 TEST CONDITIONS AND RESULTS

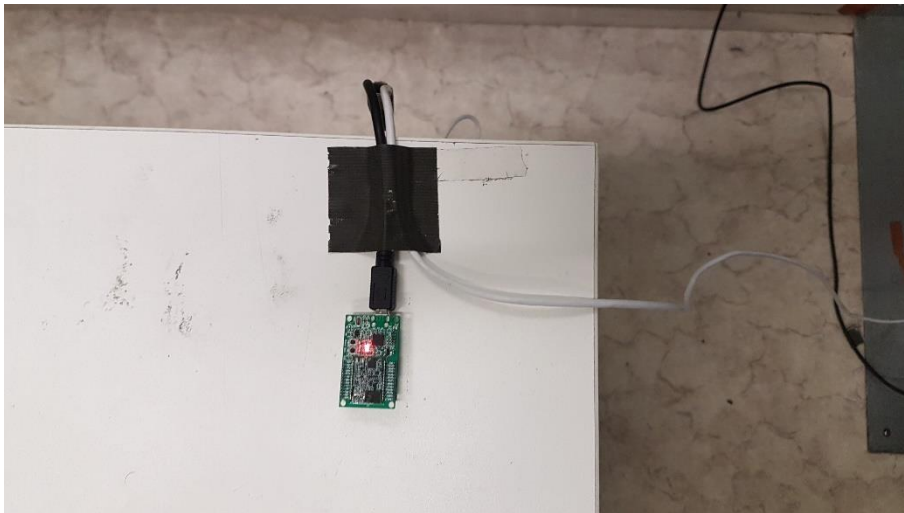
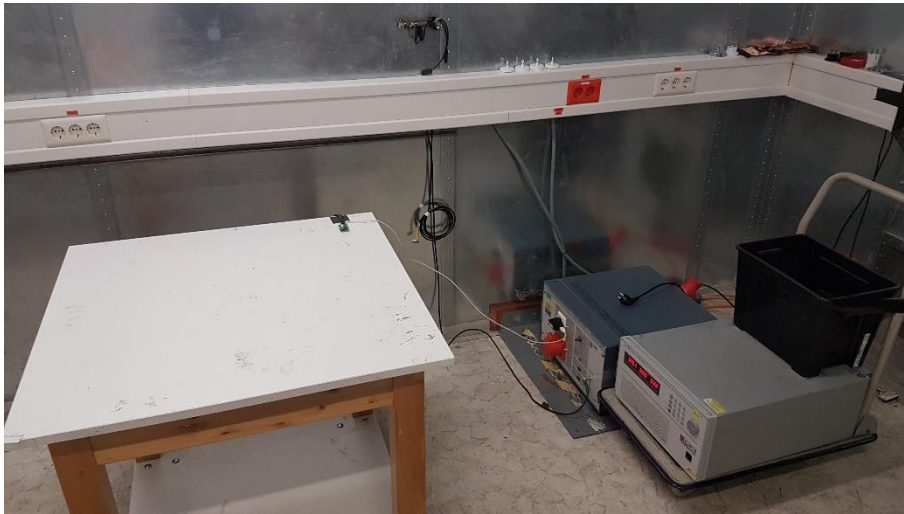
5.1 AC power line conducted emissions

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 EIRP

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

5.2.1 Description of the test location

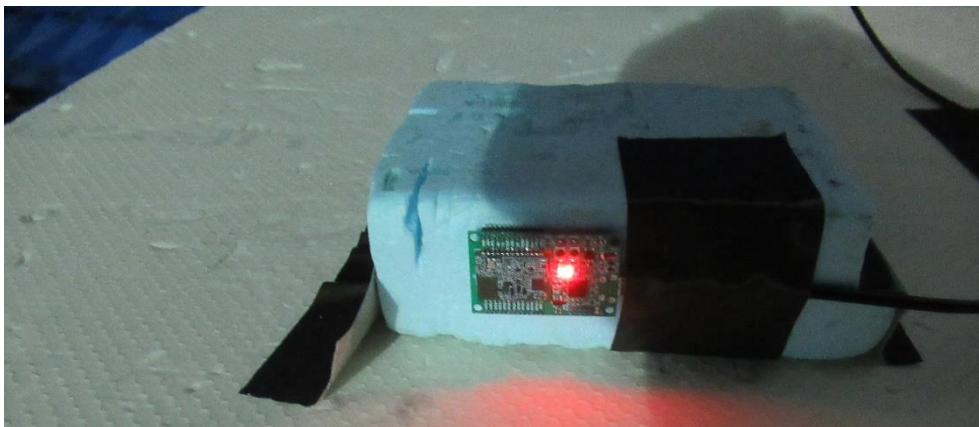
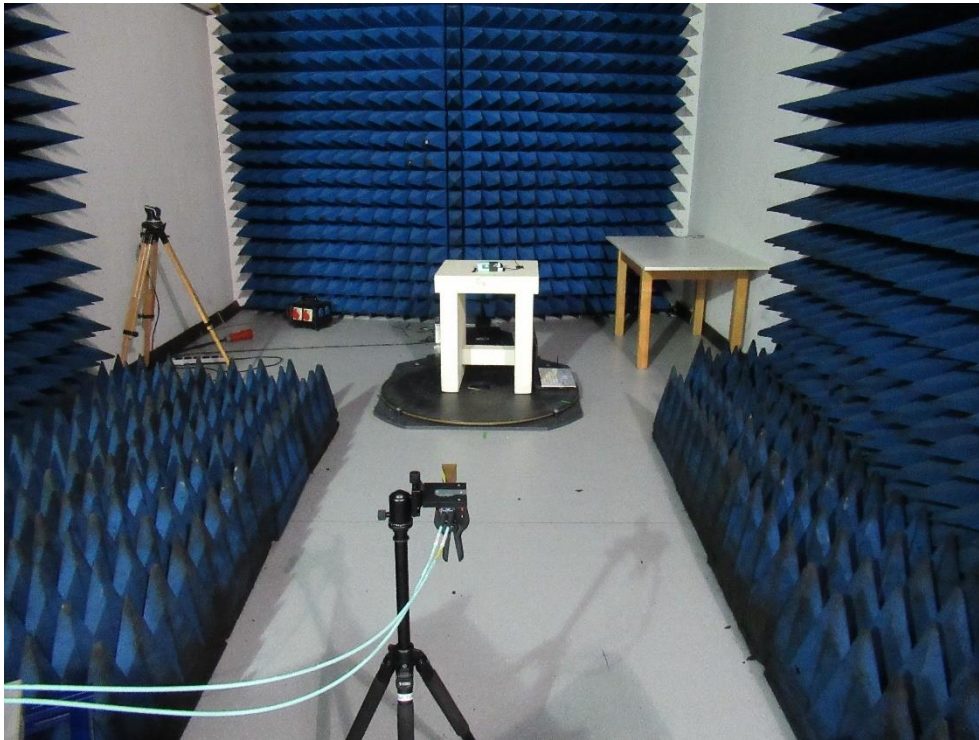
Test location: Anechoic chamber 2
Test distance: 3 m

5.2.2 Applicable standard

According to FCC Part 15C, Section 15.255(c)(1)(i):

The average power of any emission shall not exceed 40 dBm and the peak power of any emission shall not exceed 43 dBm.

5.2.3 Photo documentation of the test set-up



5.4 Spurious emissions

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 distance: 3 m

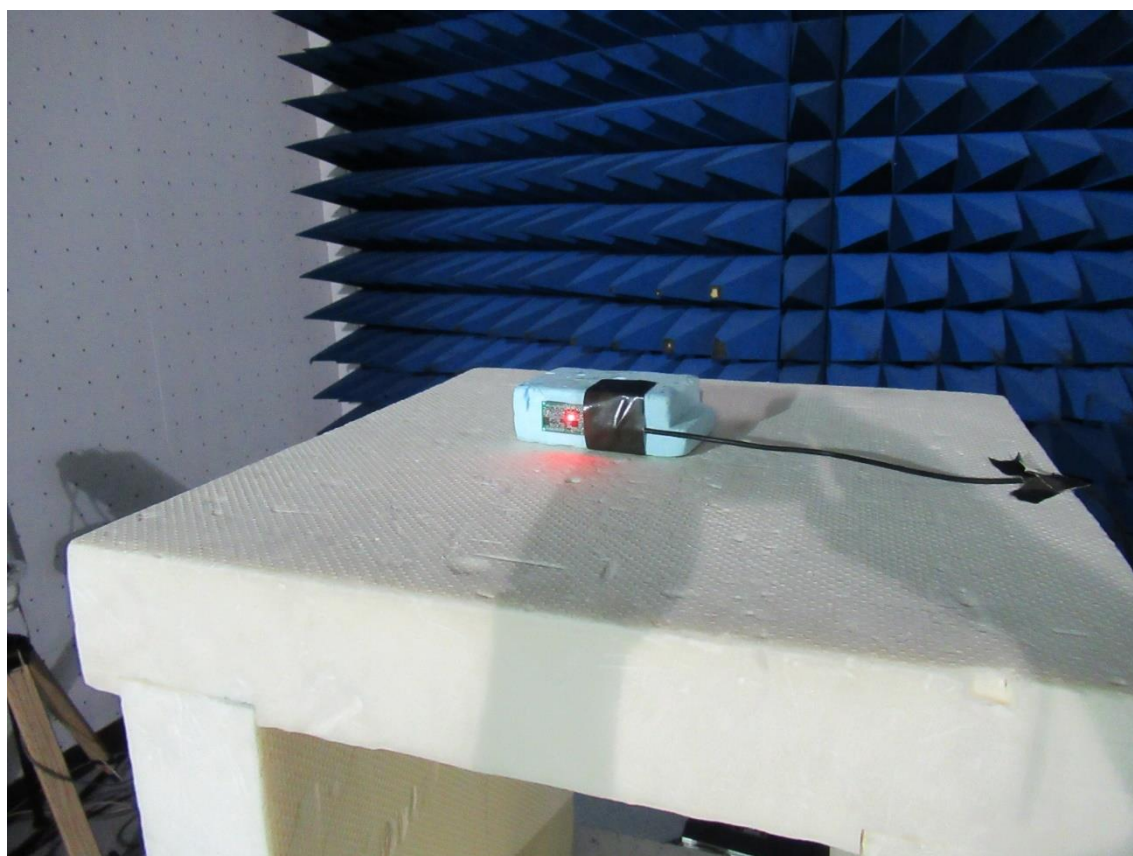
Test location: Anechoic chamber 2
Test distance: 3 m

5.4.2 Photo documentation of the test set-up

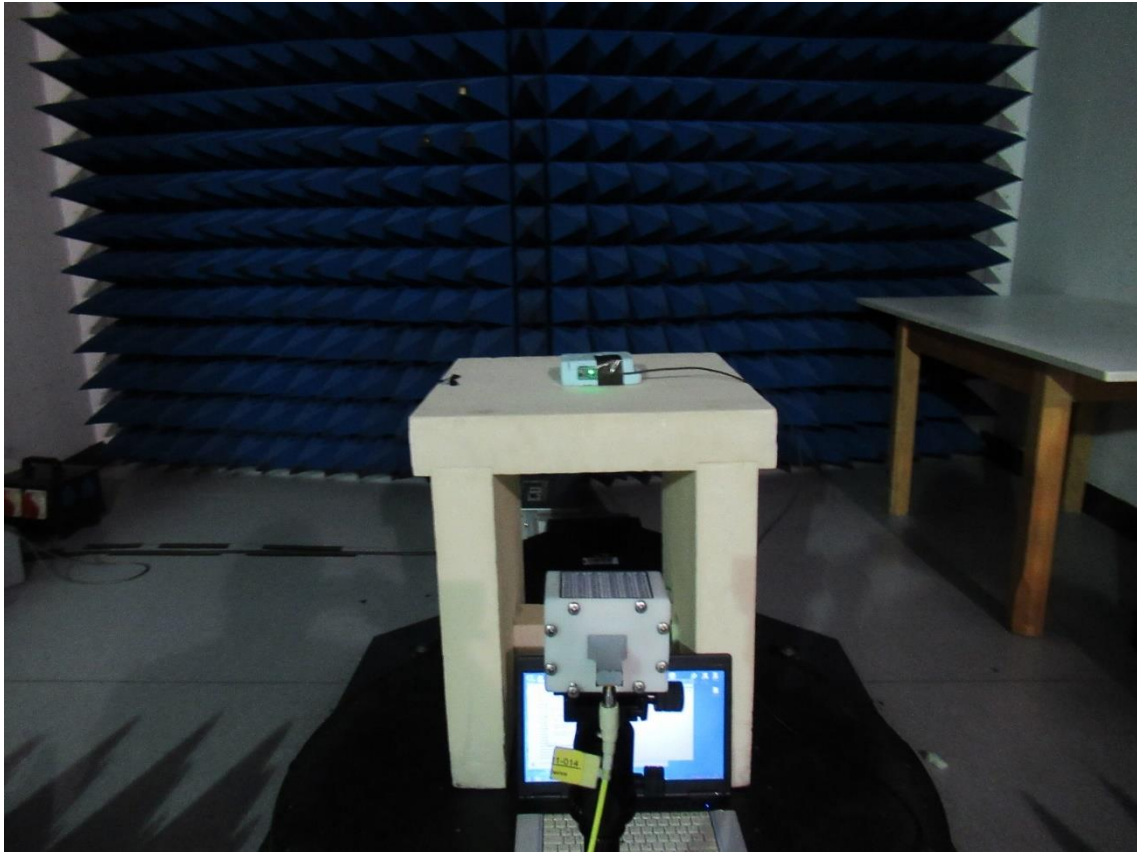
30 MHz – 1 GHz



1 GHz – 18 GHz

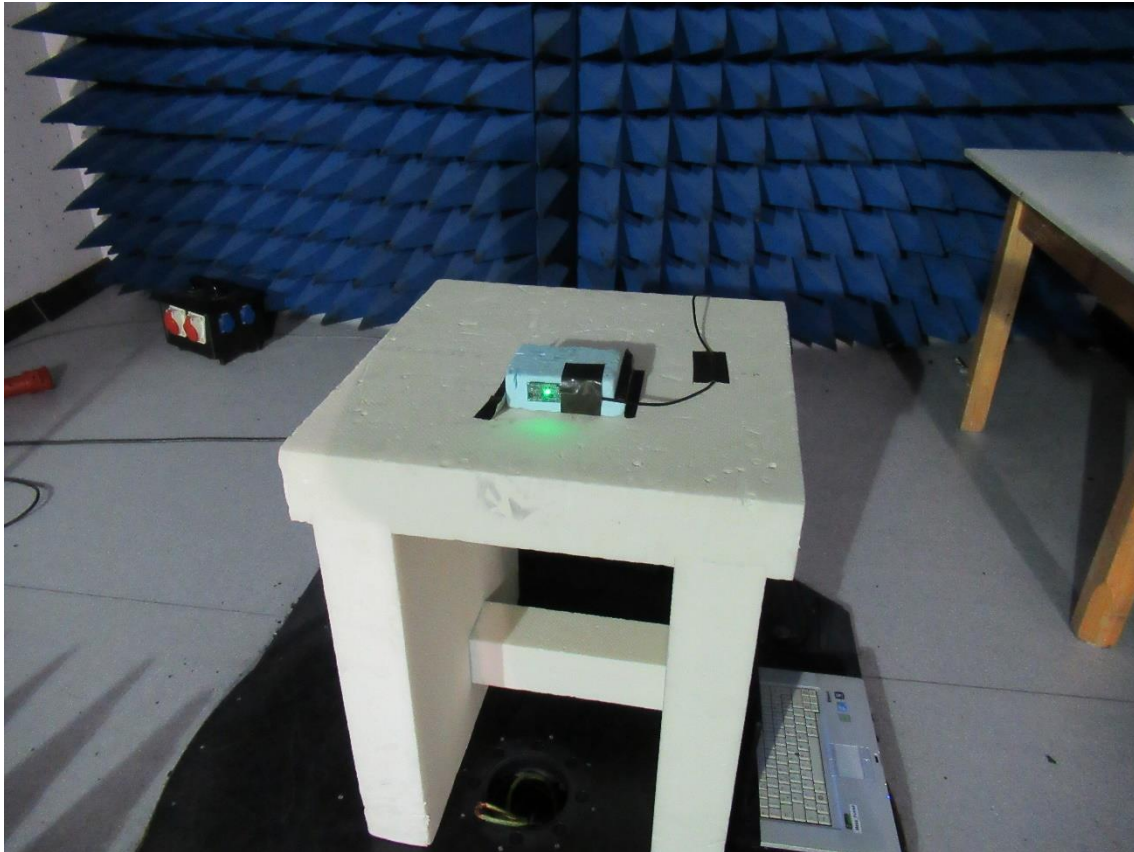


18 GHz – 40 GHz



40 GHz – 200 GHz





5.4.3 Applicable standard

According to FCC Part 15C, Section 15.255 (d):

- (1) The power density of any emissions outside the 57-71 GHz band shall consist solely of spurious emissions.
- (2) Radiated emissions below 40 GHz shall not exceed the general limits in §15.209.
- (3) Between 40 GHz and 200 GHz, the level of these emissions shall not exceed 90 pW/cm² at a distance of 3 meters.
- (4) The levels of the spurious emissions shall not exceed the level of the fundamental emission.

5.4.4 Description of Measurement

The radiated emissions from the EUT are measured in the frequency range of 30 MHz to 1000 MHz using a tuned receiver and appropriate broadband linearly polarized antennas. The setup of the EUT and the measurement procedure is in accordance to ANSI C63.10, Item 9. In the frequency range above 1 GHz a spectrum analyser is used with appropriate linear polarized antennas. If the emission level in peak mode complies with the average limit testing is stopped and peak values will be reported, otherwise, the emission is measured in average mode again and reported. The EUT is measured in TX continuous mode under normal conditions.

Instrument settings:

30 MHz – 1000 MHz:	RBW: 120 kHz;
1000 MHz – 200 GHz	RBW: 1 MHz, VBW: 3 MHz;

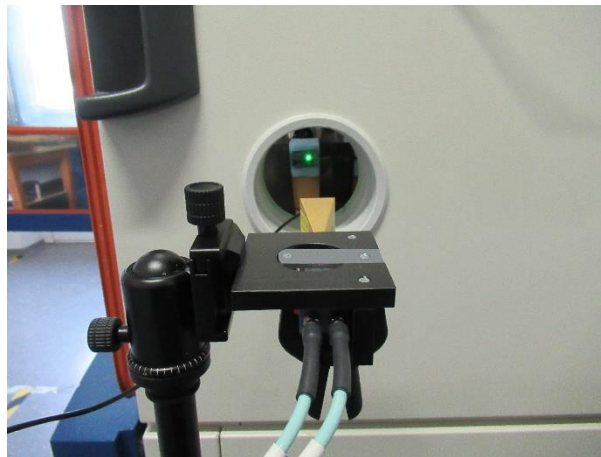
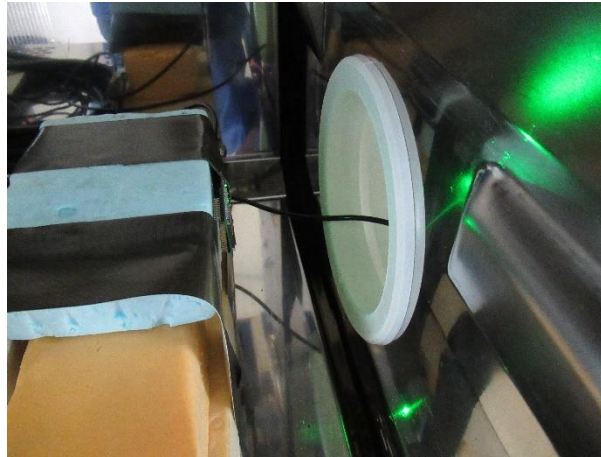
5.5 Frequency stability

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 15C, Section 15.255(f):

Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation. Equipment is presumed to operate over the temperature range -20 to $+50$ degrees Celsius with an input voltage variation of 85% to 115% of rated input voltage, unless justification is presented to demonstrate otherwise.