

5 TEST CONDITIONS AND RESULTS

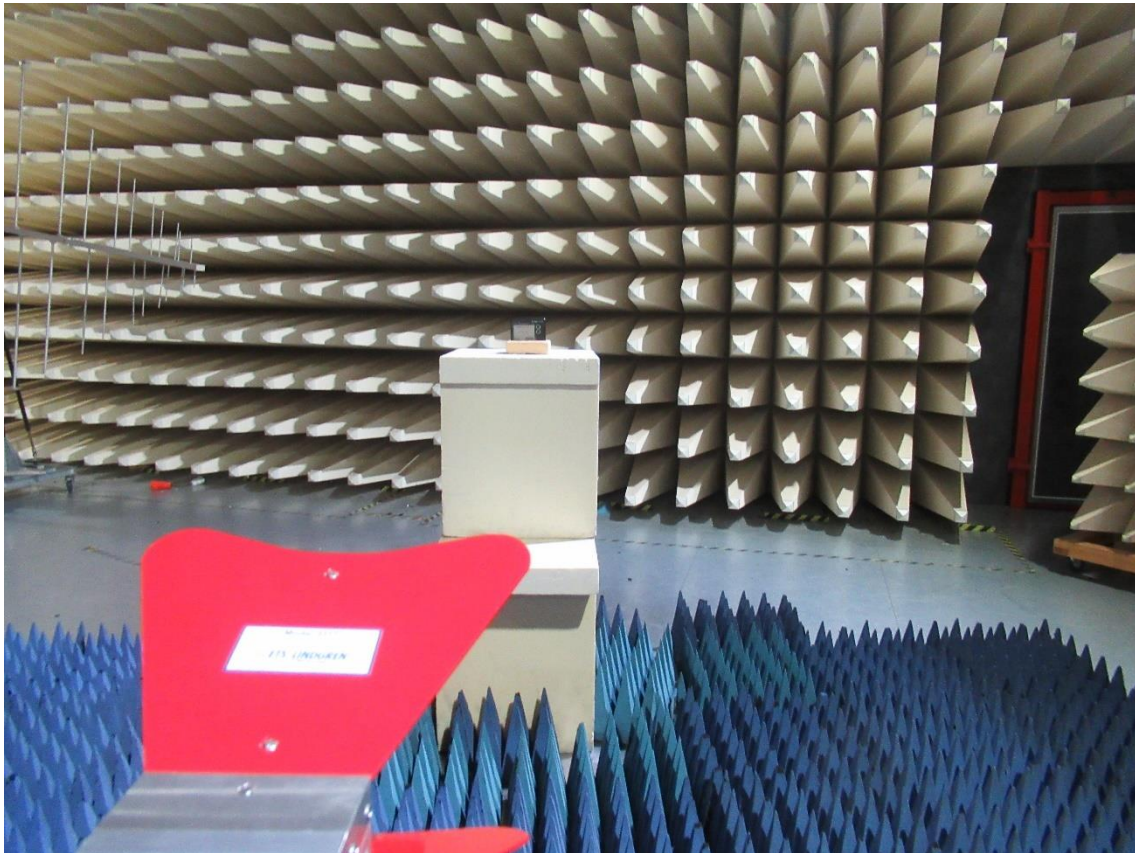
5.1 UWB Bandwidth

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

5.1.1 Description of the test location

Test location: Anechoic chamber 1

5.1.2 Photo documentation of the test set-up



FCC ID: 2ALC5-KNX-ETAG1 IC: 25557-KNXETAG1



5.1.3 Applicable standard

According to FCC Part 15, Section 15.250(a):

The -10 dB bandwidth of a device operating under the provisions of this section must be contained within the 5925-7250 MHz band under all conditions of operation including the effects from stepped frequency, frequency hopping or other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage.

According to FCC Part 15, Section 15.250(b):

The -10 dB bandwidth of the fundamental emission shall be at least 50 MHz. For transmitters that employ frequency hopping, stepped frequency or similar modulation types, measurement of the -10 dB minimum bandwidth specified in this paragraph shall be made with the frequency hop or step function disabled and with the transmitter operating continuously at a fundamental frequency following the provisions of §15.31(m)

5.1.4 Description of Measurement

The measurement was performed radiated at a distance of 1 m. The bandwidth was measured at an amplitude level reduced from the reference level of a modulated channel by a ratio of -10 dB.

Spectrum analyser settings:

RBW: 1 MHz, VBW: 3 MHz, Detector: Peak

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5.2 Radiated Emissions 9 kHz to 40 GHz

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

5.2.2 Photo documentation of the test set-up

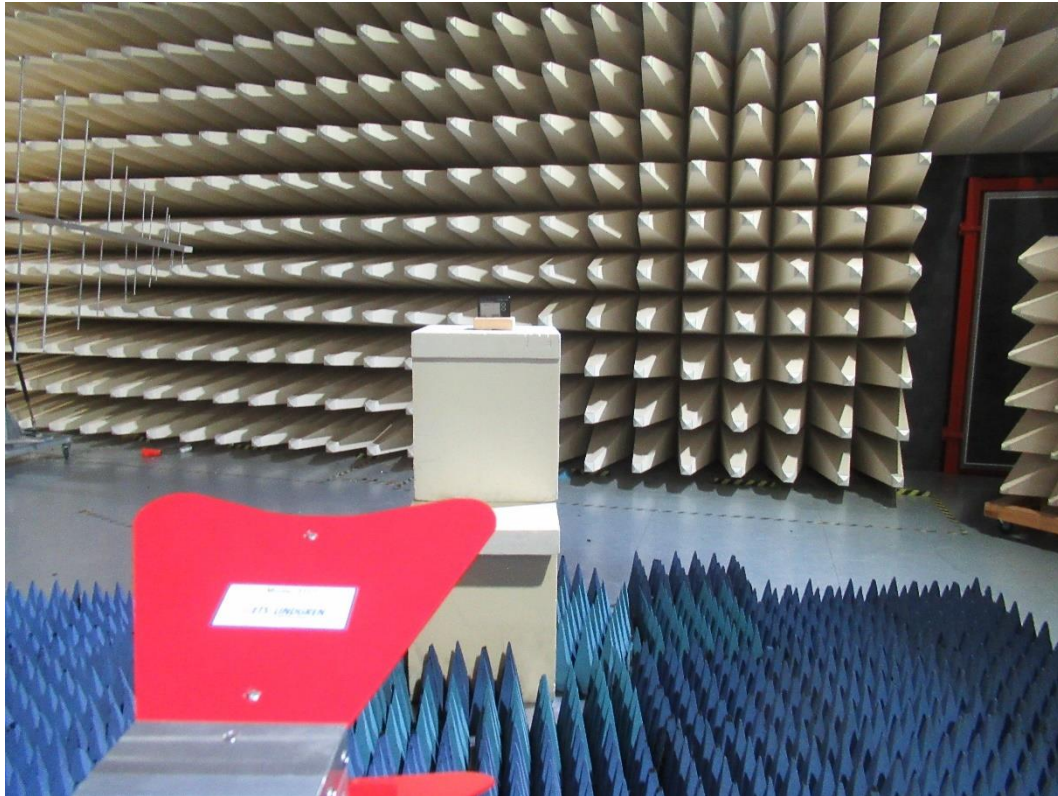
30 MHz – 960 MHz



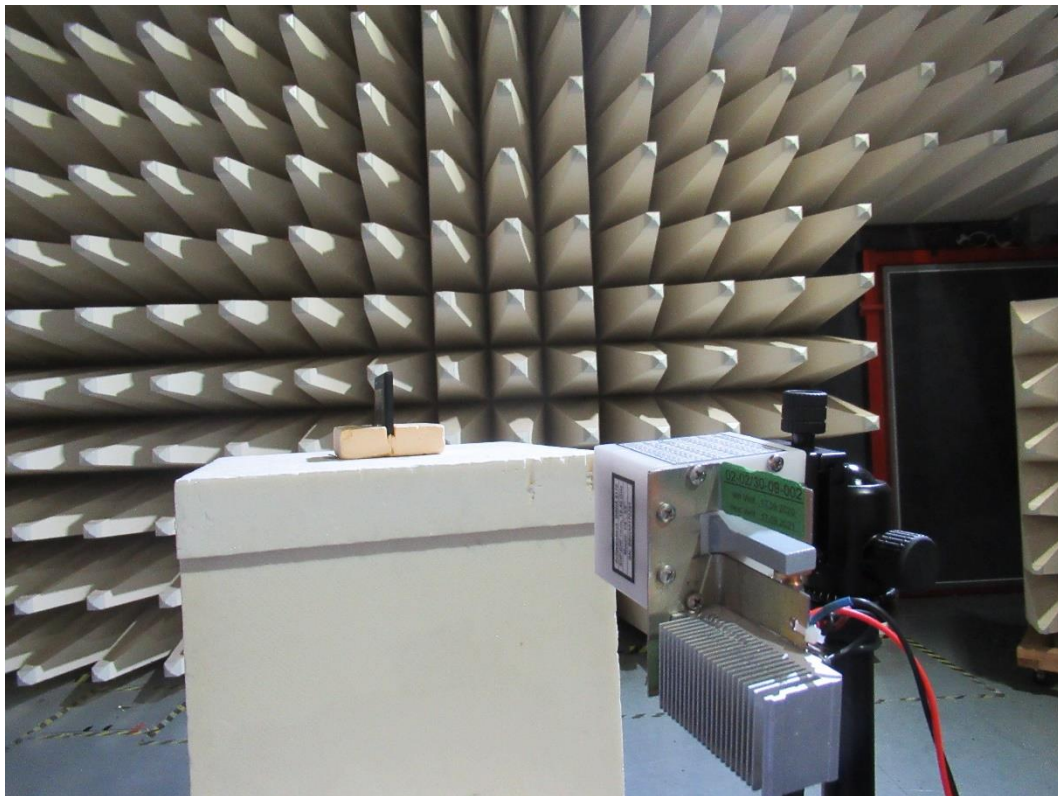
The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

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960 MHz - 18000 MHz



18000 MHz – 40000 MHz



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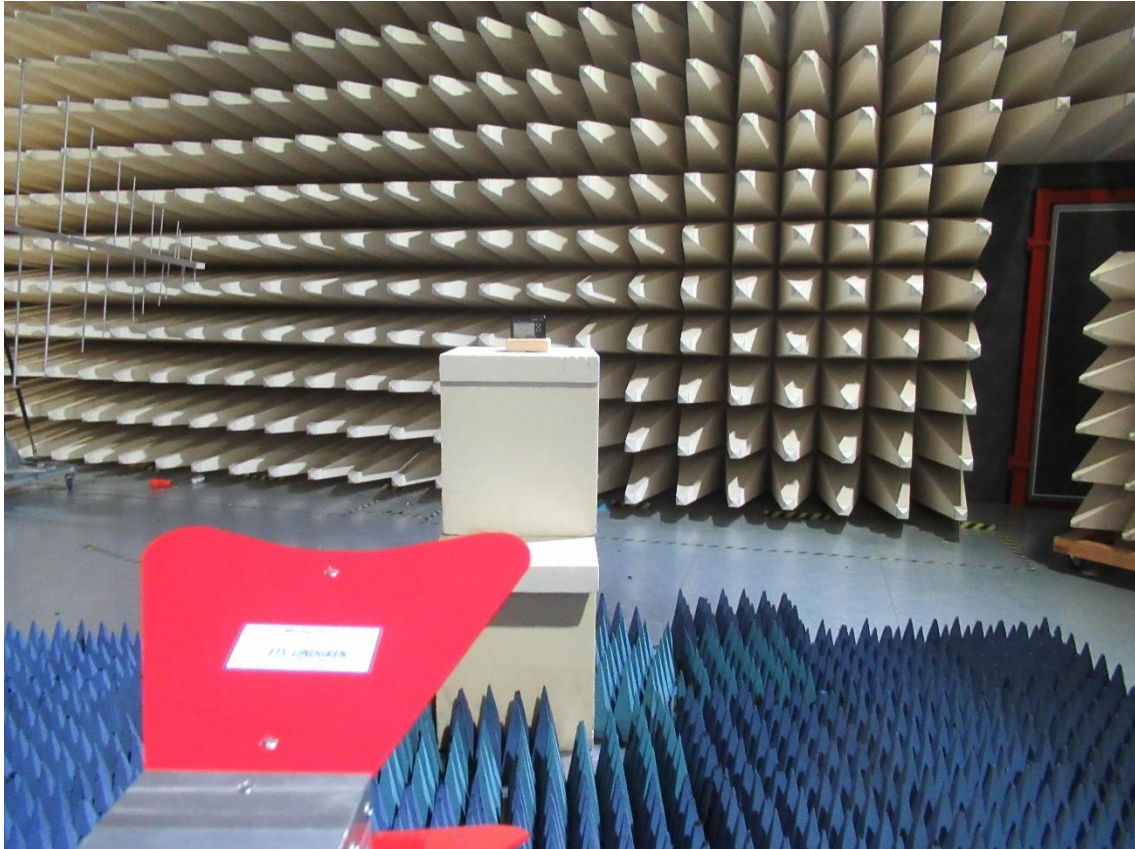
5.3 Radiated Emissions at 1164-1240 MHz and 1559-1610 MHz

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

5.3.1 Description of the test location

Test location: Anechoic chamber 1

5.3.2 Photo documentation of the test set-up



FCC ID: 2ALC5-KNX-ETAG1 IC: 25557-KNXETAG1



5.3.3 Applicable standard

According to FCC Part 15, Section 15.250(d):

In addition to the radiated emission limits specified in the table in paragraph (d)(1) of this section, transmitters operating under the provisions of this section shall not exceed the following RMS average limits when measured using a resolution bandwidth of no less than 1 kHz

5.3.4 Analyser settings

RBW: 1 kHz, VBW: 3 kHz, Detector: RMS, Sweep time: 1 ms/1kHz,

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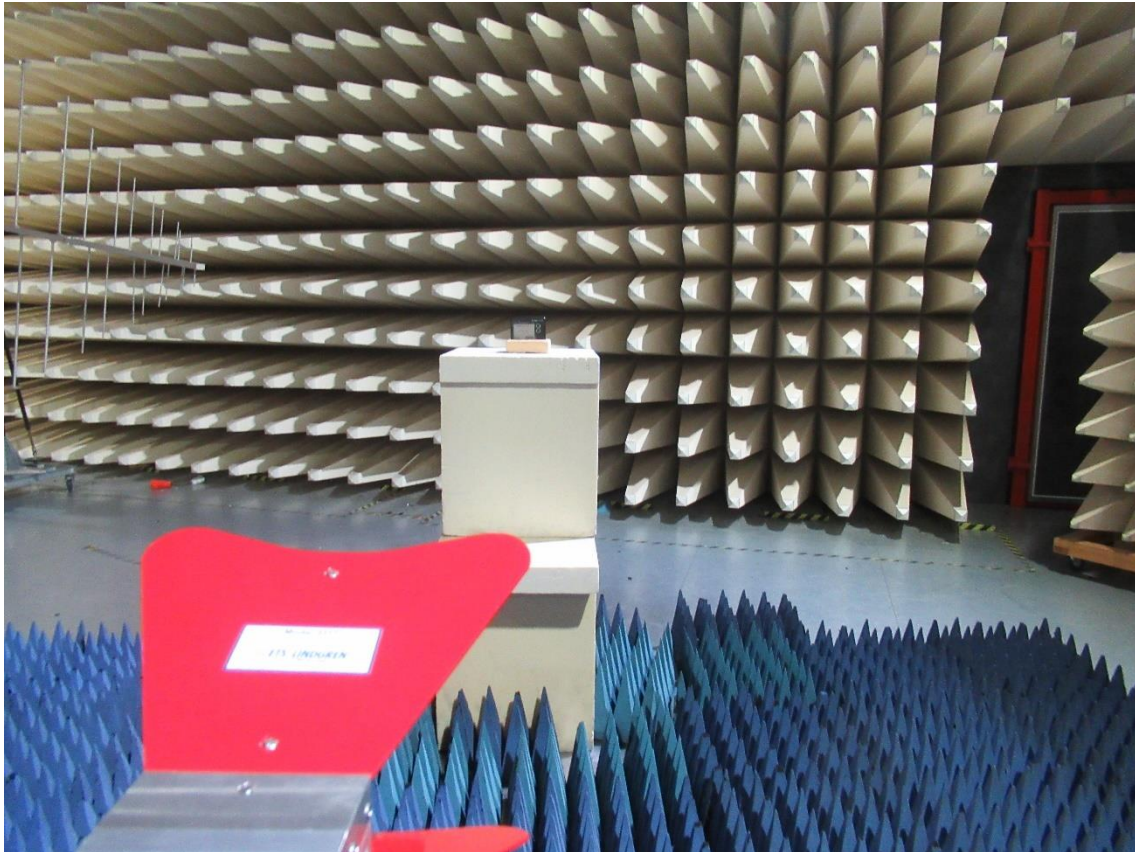
5.4 Peak Power radiated

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

5.4.1 Description of the test location

Test location: Anechoic chamber 1

5.4.2 Photo documentation of the test set-up – see ATTACHMENT B



The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.

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5.4.3 Applicable standard

According to FCC Part 15, Section 15.250(d)(3):

There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_m . That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a correspondingly different peak emission limit, following the procedures described in §15.521.

5.4.4 Analyser settings

RBW: 50 MHz, VBW: 80 MHz, Detector: Peak, Trace Mode: Max hold