

FCC ID: O2FM2UHF-RFID

IC:9137A- O2FM2UHF RFID

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: NONE

Remarks:

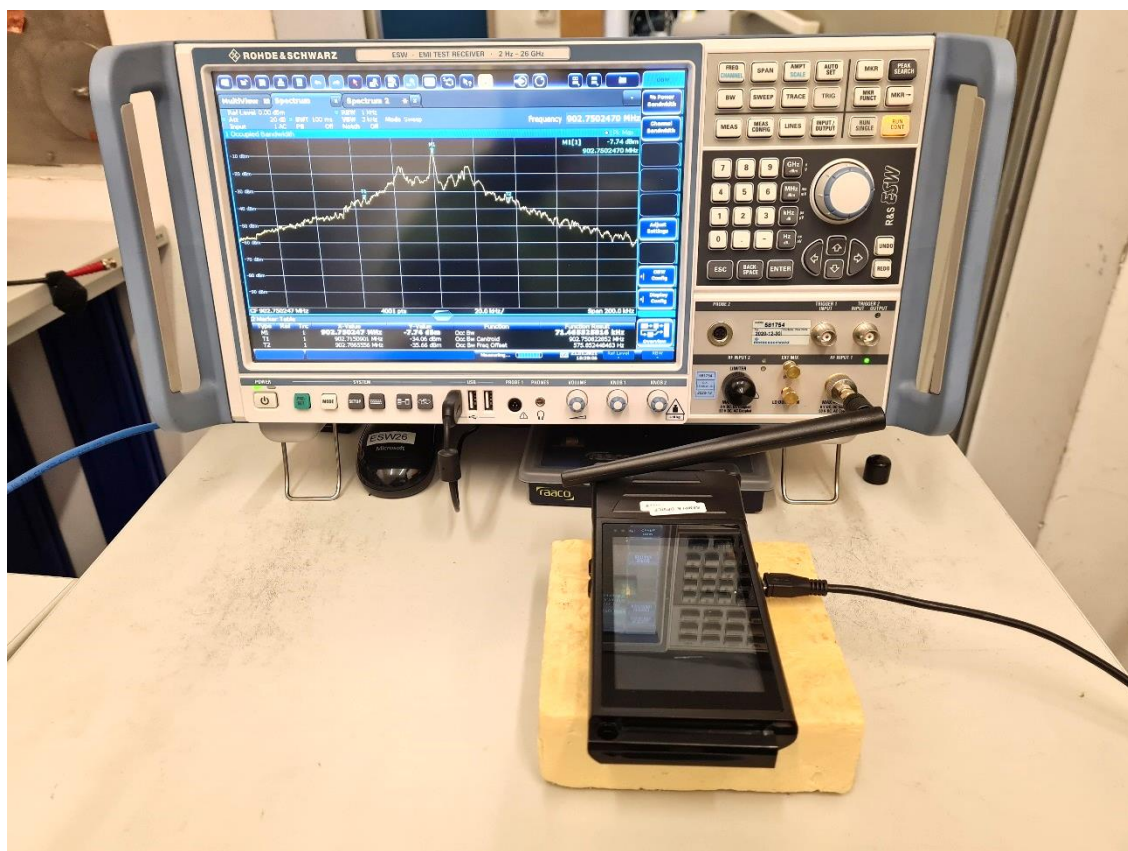
5.2 Emission bandwidth

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

5.2.1 Description of the test location

Test location: Shielded Room S6

5.2.2 Photo documentation of the test set-up



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5.3 Maximum peak output power

For test instruments and accessories used see section 6 Part **CPR 2**.

5.3.1 Description of the test location

Test location: OATS 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 15.247(b)(2):

For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels.

5.3.4 Description of Measurement

The measurement is performed radiated with a measurement receiver, because of the PCB antenna, no temporary antenna connector is available. While measuring the hopping is stopped, the carrier is measured in continuous CW transmit mode using the assigned frequency according to ANSI C63.10, item 7.8.5.

Receiver settings:
RBW: 120 kHz, Detector: Max peak, Measurement time: 1 s

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5.5 Band edge compliance

For test instruments and accessories used see section 6 Part SEC2-3.

5.5.1 Description of the test location

Test location: Shielded Room S6

5.5.2 Applicable standard

According to FCC Part 15C, Section 15.247(d):

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limit specified in Section 15.209(a).

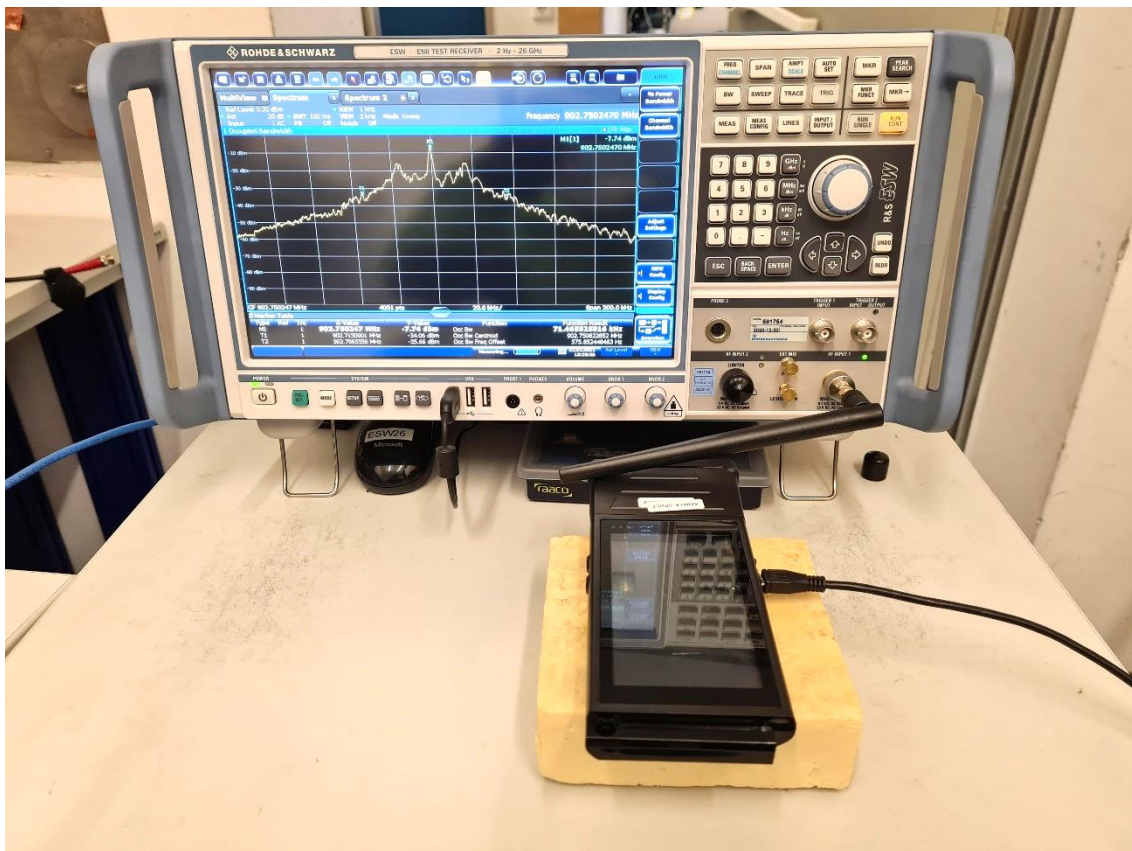
5.5.3 Description of Measurement

A spectrum analyser is connected to the output of the transmitter via a suitable attenuator while EUT was operating in transmit mode at the assigned frequency according to ANSI C63.10, item 7.8.7.

Spectrum analyser settings:

RBW: 100 kHz, VBW: 300 kHz, Detector: Max peak, Trace: Max hold, Sweep: auto

5.5.4 Photo documentation of the test set-up



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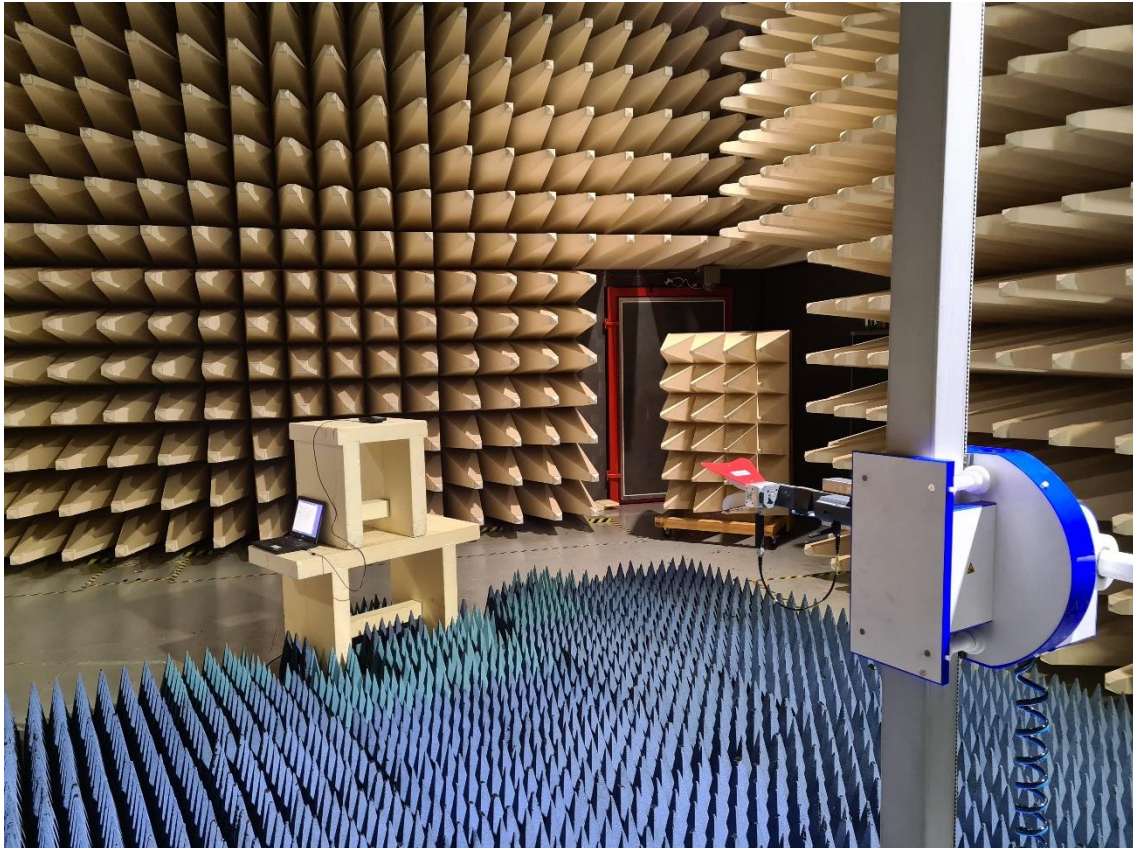
5.6 Radiated emissions in restricted bands

For test instruments and accessories used see section 6 Part **SER3**.

5.6.1 Description of the test location

Test location: Anechoic chamber 1
Test distance: 3 m

5.6.2 Photo documentation of the test set-up



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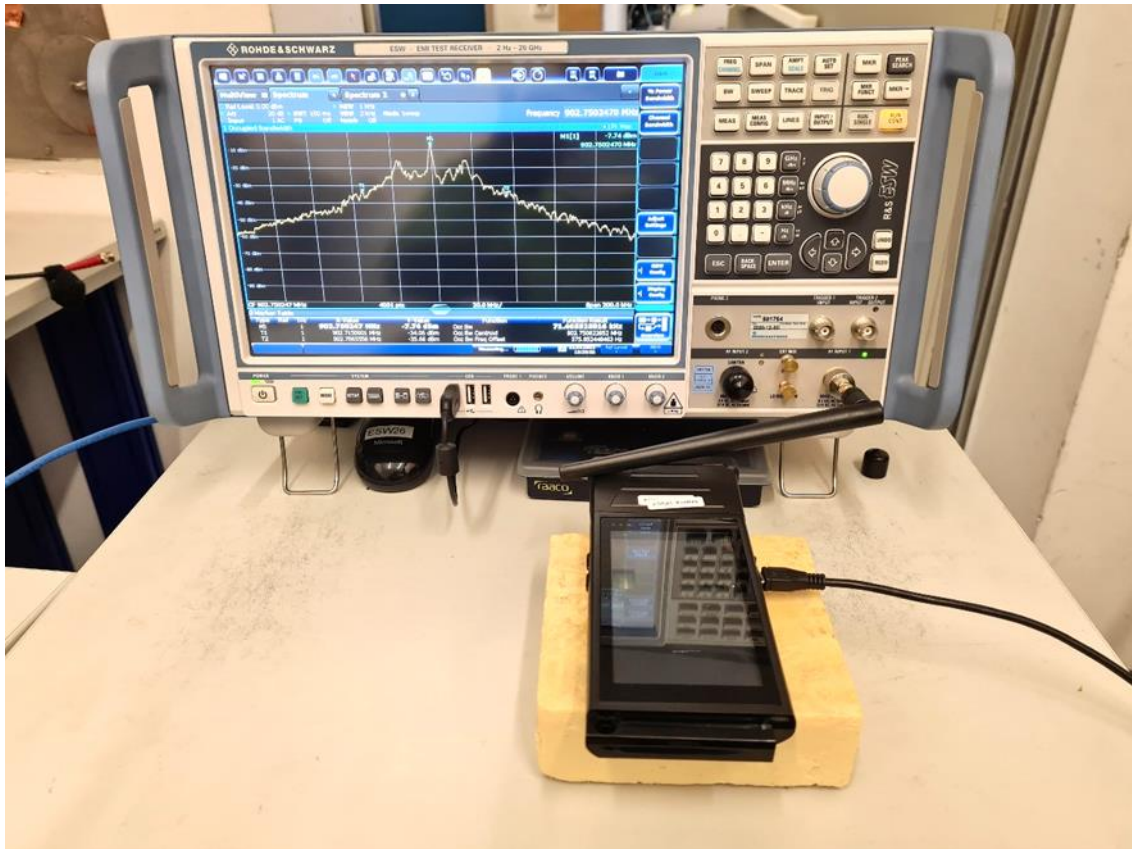
5.8 Dwell time

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

5.8.1 Description of the test location

Test location: Shielded Room S6

5.8.2 Photo documentation of the test set-up



5.8.3 Applicable standard

According to FCC Part 15, Section 15.247(a)(1)(i):

For frequency hopping systems operating in the 902-928 MHz band:

if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period;

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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5.9 Carrier frequency separation

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

5.9.1 Description of the test location

Test location: Shielded Room S6

5.9.2 Photo documentation of the test set-up



5.9.3 Applicable standard

According to FCC Part 15, Section 15.247(a)(1):

Frequency hopping systems shall have hopping channel carrier frequencies that are separated by 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

5.9.4 Description of Measurement

The measurement is performed using a spectrum analyser in single sweep mode. A part of the operating frequency is used for better resolution. In normal application mode all the channels of the part of operating frequency are displayed and the separation is measured. The 20 dB OBW has to be measured before to compare whether the OBW requirement is fulfilled.

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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Limit according to FCC Part 15C, Section 15.247(a)(1):

Frequency (MHz)	Hopping channels	Limit channel separation
902 - 928	≥ 50	> 25 kHz or 20 dB bandwidth, whichever is greater

The requirements are **FULFILLED**.

Remarks: For detailed test results please see the following test protocols.

5.10 Number of hopping channels

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

5.10.1 Description of the test location

Test location: Shielded Room S6

5.10.2 Photo documentation of the test set-up

