FCC ID: OHCSXPAMP1 **IC: 10671A-SXPAMP1**

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: The measurement is not applicable the EUT has no AC mains connection.

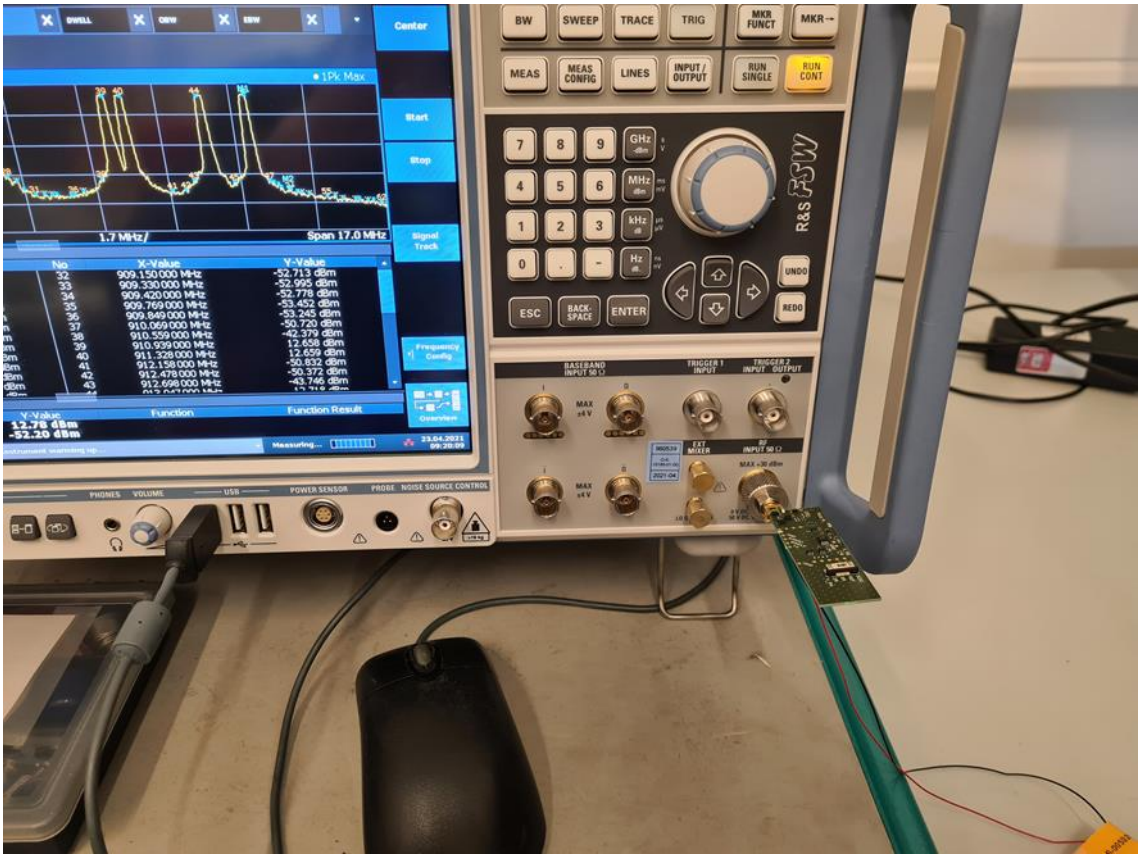
5.2 Emission bandwidth

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



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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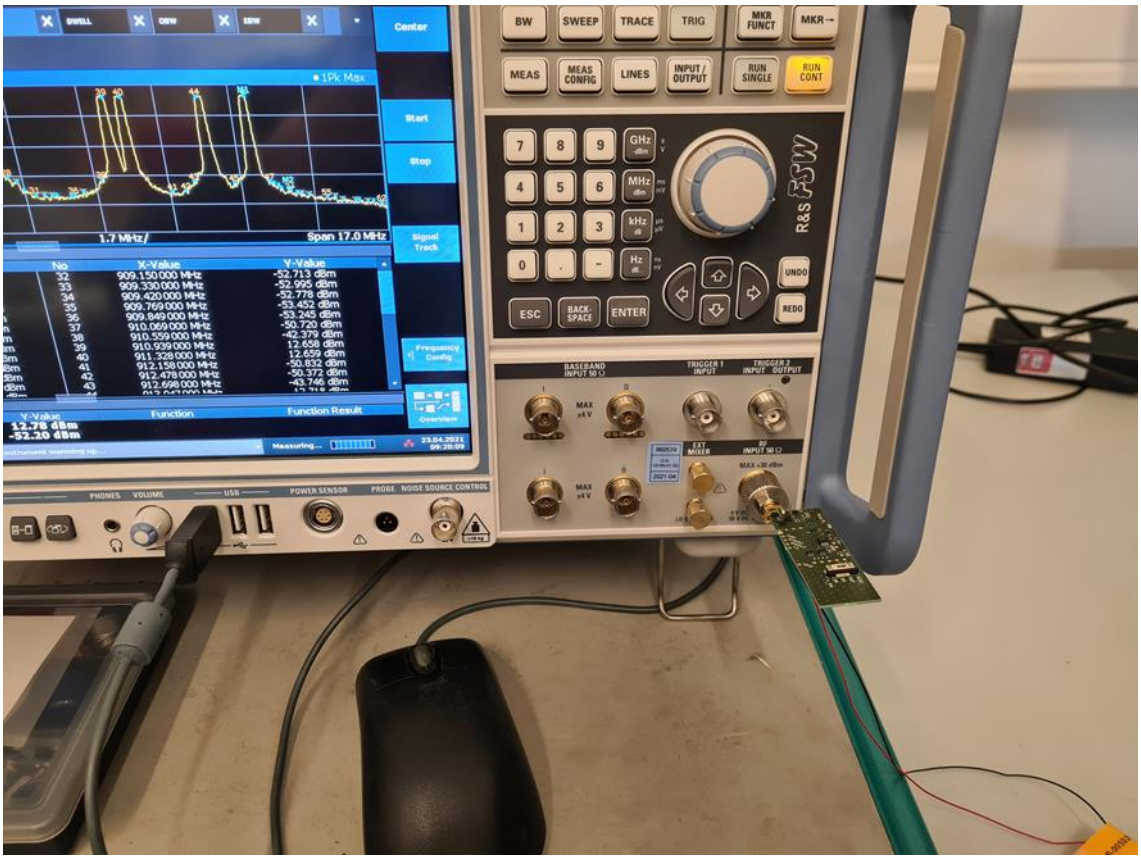
5.3 Maximum peak output power conducted

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

5.3.1 Description of the test location

Test location: Shielded Room S6

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, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section.

5.3.4 Description of Measurement

A spectrum analyser is connected to the output of the transmitter via a suitable attenuator while EUT is operating in transmit mode using the assigned frequency according to ANSI C63.10, 7.8.5.

Analyser settings:
RBW: 3 MHz, VBW ≥ RBW, Detector: Max peak, Trace: Max hold, Sweep time: auto

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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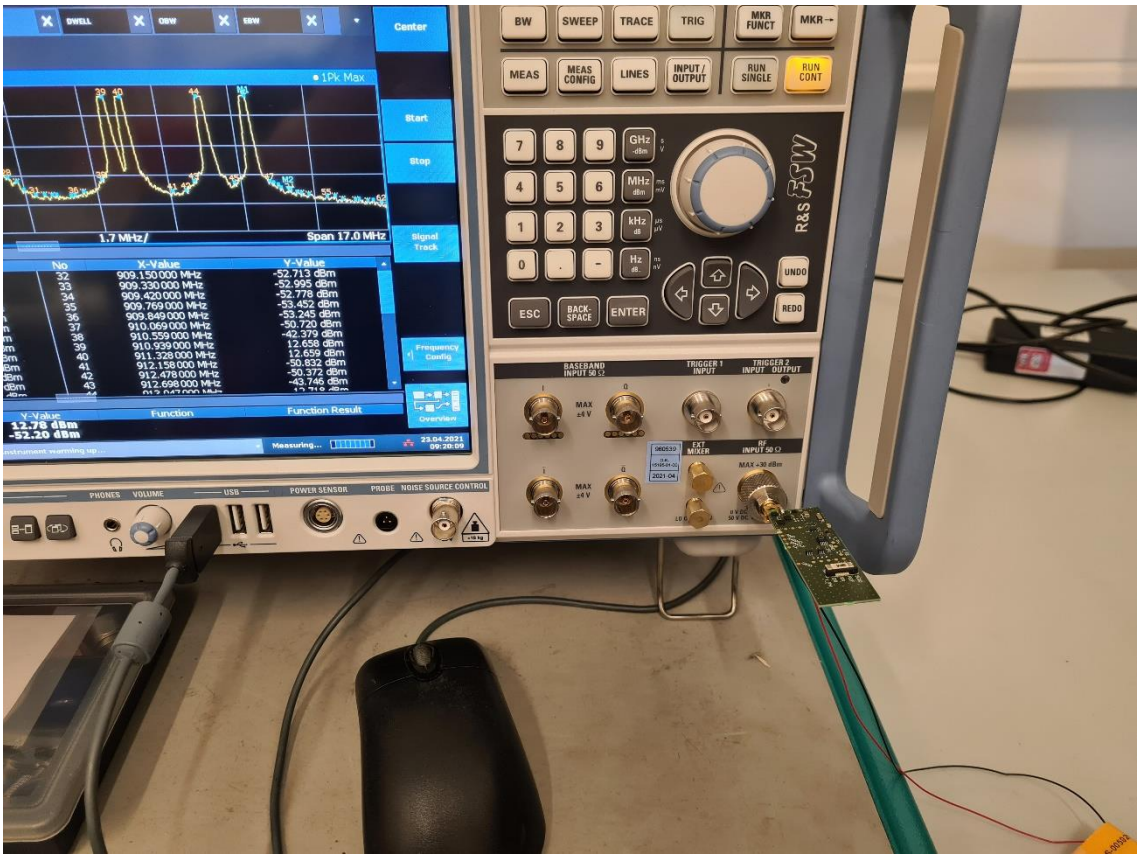
5.4 Power spectral density

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

5.4.1 Description of the test location

Test location: Shielded Room S6

5.4.2 Photo documentation of the test set-up



5.4.3 Applicable standard

According to FCC Part 15, Section 15.247(e):
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

5.4.4 Description of Measurement

The measurement is performed using the procedure set out in 11.10 of ANSI C63.10. The power measurement was done as peak power measurement. Therefore, the PKPSD is measured. The max peak was located and with the spectrum analyser and a marker set to peak.

Spectrum analyser settings:
RBW: 3 kHz, VBW: 10 kHz, Detector: Peak, Sweep time: auto

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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5.6 Band edge compliance

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

5.6.1 Description of the test location

Test location: Shielded Room S6

5.6.2 Applicable standard

According to FCC Part 15C, Section 15.247(d):
In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

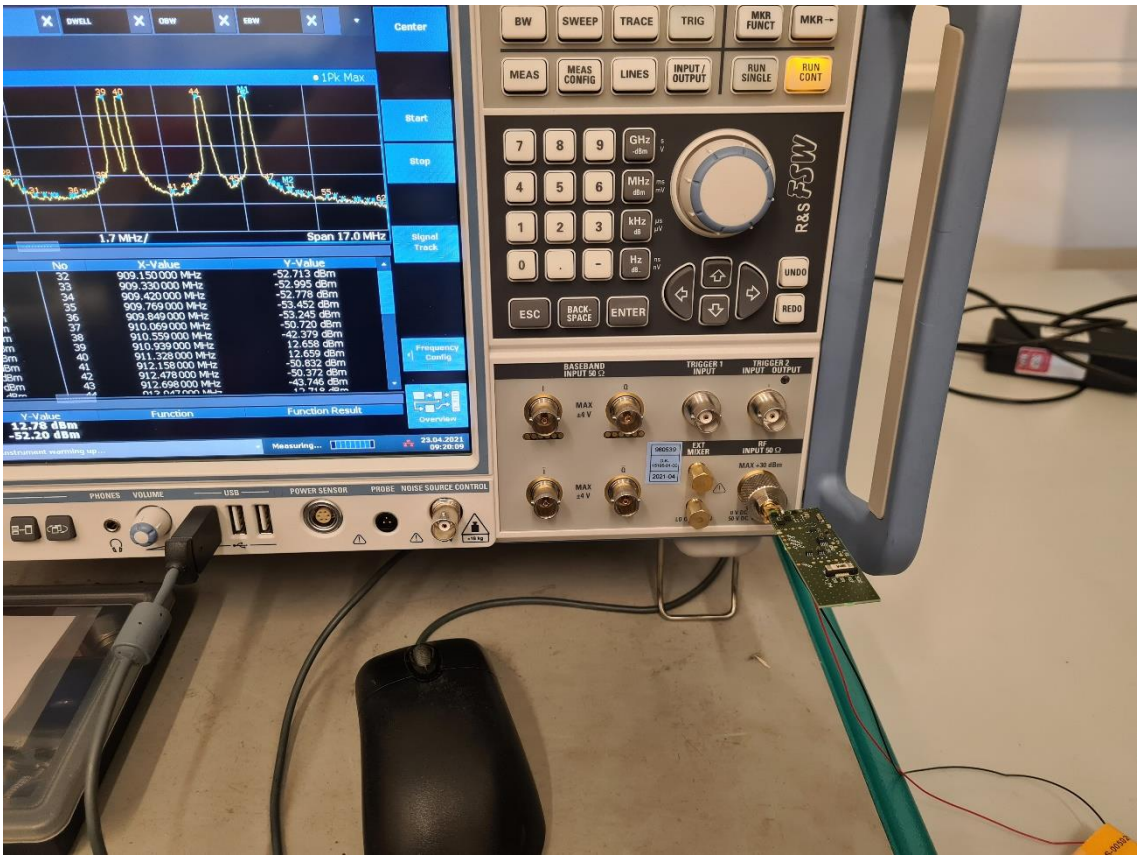
ANSI C63.10, 7.8.6: For band-edge measurements, use the band-edge procedure in 6.10. Band-edge measurements shall be tested both on single channels, and with the EUT hopping.

5.6.3 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 ANSI C63.10, 6.10.

Spectrum analyser settings:
RBW: 100 kHz, VBW: 300 kHz, Detector: RMS, Trace: Max hold, Sweep: auto

5.6.4 Photo documentation of the test set-up



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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5.7 Radiated emissions in restricted bands

For test instruments and accessories used see section 6 Part **SER2, SER3**.

5.7.1 Description of the test location

Test location: OATS 1
Test distance: 3 m

Test location: Anechoic chamber 1
Test distance: 3 m

5.7.2 Photo documentation of the test set-up

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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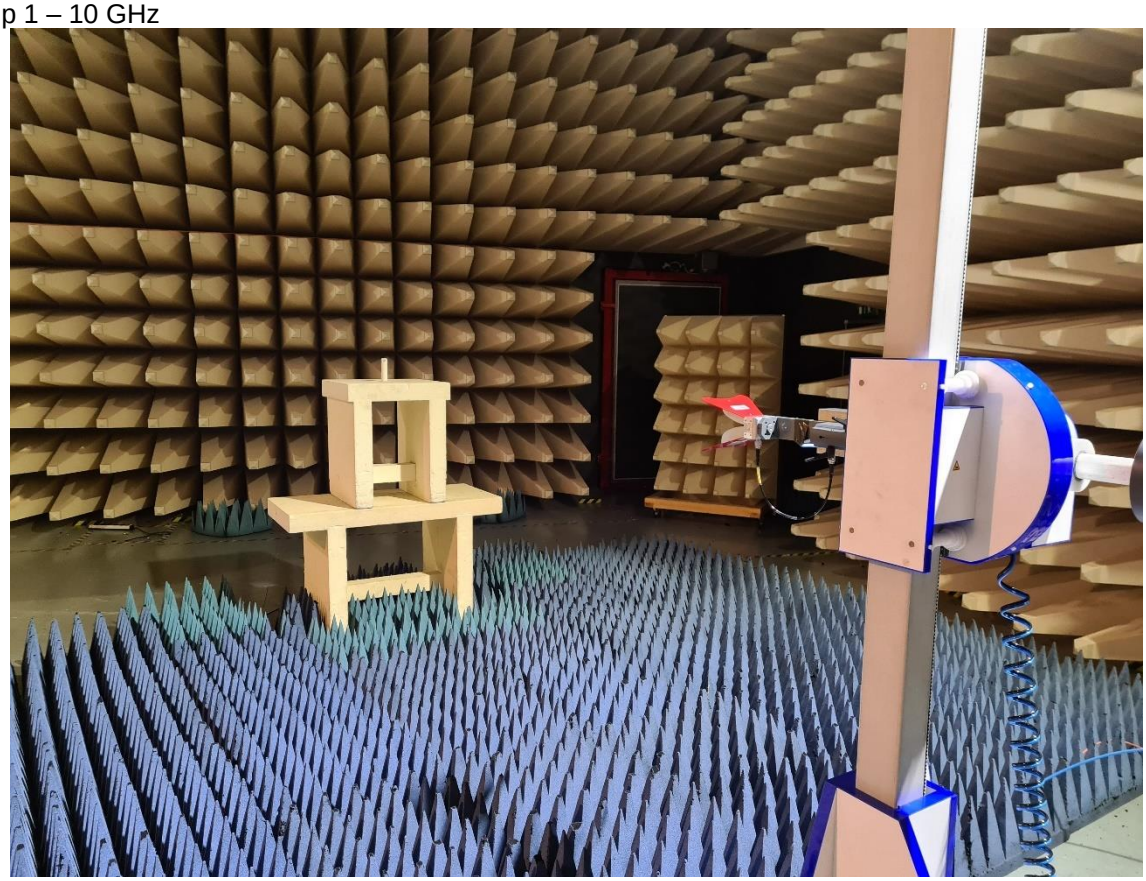
Test setup 1 – 10 GHz



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.

FCC ID: OHCSXPAMP1 **IC: 10671A-SXPAMP1**

5.7.3 Applicable standard

According to FCC Part 15, Section 15.205(a):
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).

5.7.4 Description of Measurement

The restricted bands are measured radiated. The span of the spectrum analyser was set wide enough to capture the restricted band and measure the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.

Spectrum analyser settings:
RBW: 1 MHz, VBW: 3 MHz, Sweep: Auto, Detector function: Peak

5.7.5 Test result

f < 1000 MHz
Hopping channels

Frequency (MHz)	Reading Vert. (dBµV)	Reading Hor. (dBµV)	Correct. Vert. (dB)	Correct. Hor. (dB)	Level Vert. (dBµV/m)	Level Hor. (dBµV/m)	Limit (dBµV/m)	Dlimit (dB)
42.50	7.4	-2.2	14.5	15.3	21.9	13.1	40.0	-18.1
852.80	5.4	4.0	29.2	29.6	34.6	33.6	46.0	-11.4
868.60	0.9	-0.5	29.4	29.8	30.3	29.3	46.0	-15.7
881.00	0.8	2.1	29.6	30.0	30.4	32.1	46.0	-13.9
943.00	1.5	0.7	30.3	30.7	31.8	31.4	46.0	-14.2

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.