



TEST REPORT

Test report no.: 1-6411-23-01-10_TR1-R01



Deutsche
Akkreditierungsstelle
D-PL-12047-01-00

Testing laboratory

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Accredited Testing Laboratory:

The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2018-03) by the Deutsche Akkreditierungsstelle GmbH (DAkkS)

The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number: D-PL-12047-01-00

Applicant

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Manufacturer

Continental Automotive Technologies GmbH

Heinrich-Hertz-Str. 45

78052 Villingen-Schwenningen / GERMANY

Test standard/s

ETSI EN 300 328 V2.2.2

Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum

For further applied test standards please refer to section 3 of this test report.

Test Item

Kind of test item: Connected Infotainment Box / ConneCtivity Unit 3

Model name: CIBCCU3

Frequency: 2400 MHz to 2483.5 MHz

Technology tested: WLAN

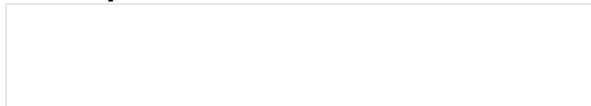
Antenna: Integrated antenna

Power supply: 12.0 V DC by external power supply

Temperature range: -30°C to +70°C

This test report is electronically signed and valid without handwritten signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Test report authorized:



Marco Bertolino
Supervisor Radio Services
Radio Labs

Test performed:



Andreas Curette
Lab Manager
Radio Labs

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2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. cetecom advanced GmbH does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item.

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2.2 Application details

Date of receipt of order:	2024-05-27
Date of receipt of test item:	2024-10-07
Start of test:*	2024-10-07
End of test:*	2024-10-11
Person(s) present during the test:	-/-

*Date of each measurement, if not shown in the plot, can be requested. Dates are stored in the measurement software.

2.3 Test laboratories sub-contracted

None

3 Test standard/s

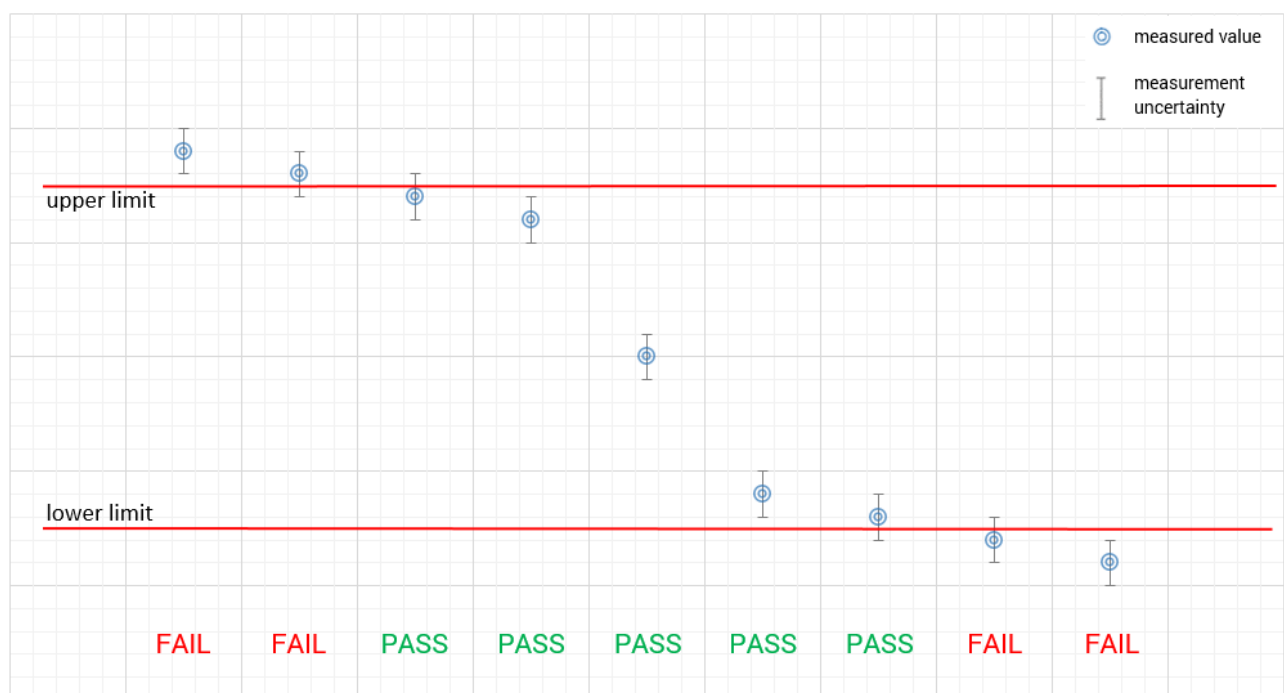
Test standard	Date	Description
ETSI EN 300 328 V2.2.2	2019-07	Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum

4 Reporting statements of conformity – decision rule

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3.

The measurement uncertainty is mentioned in this test report, see chapter 8, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong."

measured value, measurement uncertainty, verdict



5 Test environment

Temperature	:	T_{nom} T_{max} T_{min}	+22 °C during room temperature tests +70 °C during high temperature tests -30 °C during low temperature tests
Relative humidity content	:		50 %
Barometric pressure	:		not relevant for this kind of testing
Power supply	:	V_{nom} V_{max} V_{min}	12.0 V DC by external power supply Testing under extreme voltage conditions not required. Testing under extreme voltage conditions not required.

6 Test item

6.1 General description

Kind of test item	:	Connected Infotainment Box / ConneCtivity Unit 3
Model name:	:	CIBCCU3
S/N serial number	:	Rad. 24241640001000000 (Sample 1) Cond. 24322250002000000 (Sample 4)
Hardware status	:	AAA2426300400
Software status	:	SP32
Frequency band	:	2400 MHz to 2483.5 MHz
Type of radio transmission	:	DSSS, OFDM
Use of frequency spectrum	:	
Type of modulation	:	BPSK, QPSK, 16 – QAM, 64 – QAM
Number of channels	:	13 (20 MHz) 9 (40 MHz)
Channel bandwidth (B)	:	20 MHz / 40 MHz
Channel spacing	:	5 MHz
Receiver category	:	1
Antenna	:	Integrated antenna
Power supply	:	12.0 V DC by external power supply
Temperature range	:	-30°C to +70°C

6.2 Additional information

The content of the following annexes is defined in the QA. It may be that not all of the listed annexes are necessary for this report, thus some values in between may be missing.

Test setup and EUT photos are included in test report:

1-6411-23-01-01_TR1-A101-R01
1-6411-23-01-01_TR1-A102-R01
1-6411-23-01-01_TR1-A103-R01

7 Description of the test setup

Typically, the calibrations of the test apparatus are commissioned to and performed by an accredited calibration laboratory. The calibration intervals are determined in accordance with the DIN EN ISO/IEC 17025. In addition to the external calibrations, the laboratory executes comparison measurements with other calibrated test systems or effective verifications. Weekly chamber inspections and range calibrations are performed. Where possible, RF generating and signaling equipment as well as measuring receivers and analyzers are connected to an external high-precision 10 MHz reference (GPS-based or rubidium frequency standard).

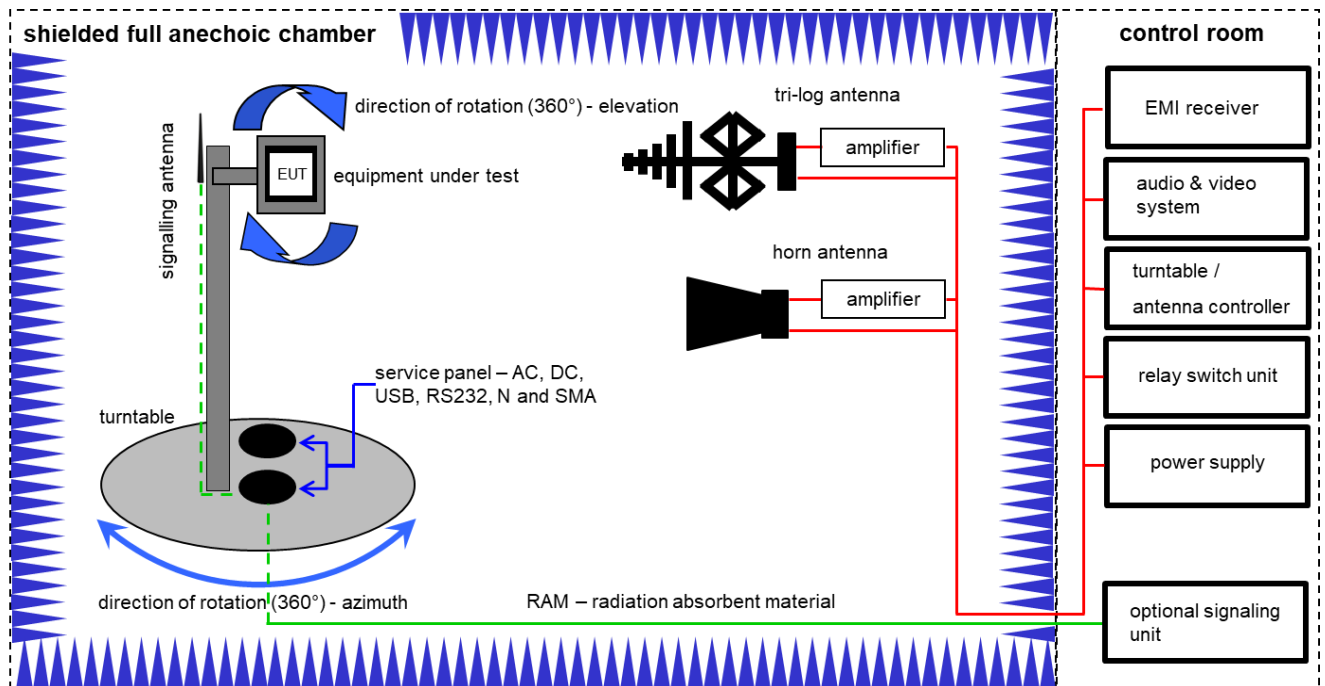
In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Lab/Item).

Each block diagram listed can contain several test setup configurations. All devices belonging to a test setup are identified with the same letter syntax. For example: Column Setup and all devices with an A.

Agenda: Kind of Calibration

k/cal	calibration / calibrated	EK	limited calibration
Ne/cnn	not required (k, ev, izw, zw not required)	zw	cyclical maintenance (external cyclical maintenance)
Ev/chk	periodic self verification	izw	internal cyclical maintenance
Ve	long-term stability recognized	g	blocked for accredited testing
vlk!	Attention: extended calibration interval		
NK!	Attention: not calibrated	*)	next calibration ordered / currently in progress
cpu	check prior usage		

7.1 Shielded fully anechoic chamber



Measurement distance: tri-log antenna and horn antenna 3 meter

$$OP = AV + D - G + CA$$

(OP-radiated output power; AV-analyzer value; D-free field attenuation of measurement distance; G-antenna gain+amplifier gain; CA-loss signal path)

Example calculation:

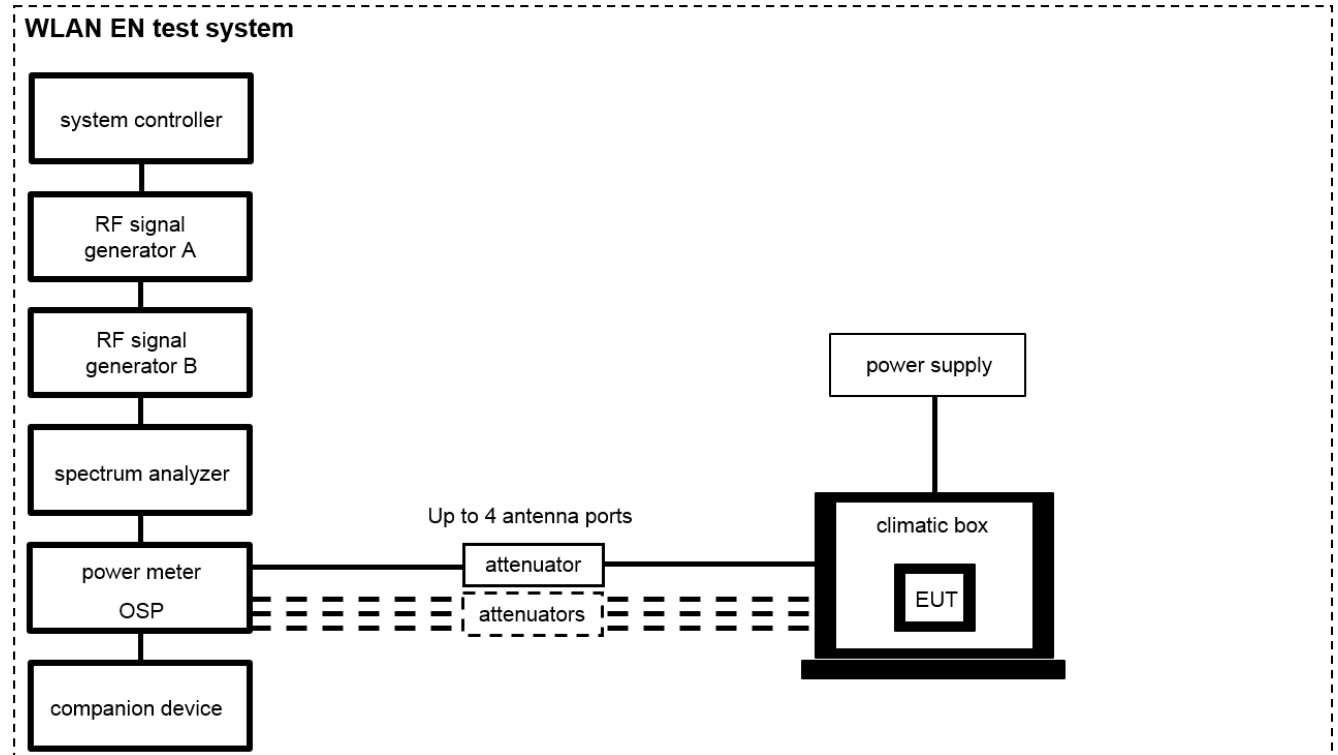
$$OP [dBm] = -65.0 [dBm] + 50 [dB] - 20 [dBi] + 5 [dB] = -30 [dBm] (1 \mu W)$$

Equipment table:

No.	Setup	Equipment	Type	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	A, B	Double-Ridged Waveguide Horn Antenna 1-18.0GHz	3115	EMCO	8812-3088	300001032	vIKI!	10.10.2023	31.10.2025
2	A, B	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck Mess - Elektronik	01029	300005379	vIKI!	09.10.2023	31.10.2025
3	A, B	Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996	ev	-/-	-/-
4	A, B	Switch / Control Unit	3488A	HP	*	300000199	ne	-/-	-/-
5	A	Band Reject filter	WRCG2400/2483-2375/2505-50/10SS	Wainwright	11	300003351	ev	-/-	-/-
6	A	High Pass Filter	VHF-3500+	Mini Circuits	-/-	400000193	ne	-/-	-/-
7	A, B	Highpass Filter	WHKX7.0/18G-8SS	Wainwright	19	300003790	ne	-/-	-/-
8	A, B	Broadband Amplifier 0.5-18 GHz	CBLU5184540	CERNEX	22049	300004481	ev	-/-	-/-
9	A, B	4U RF Switch Platform	L4491A	Agilent Technologies	MY50000037	300004509	ne	-/-	-/-
10	A, B	NEXIO EMV-Software	BAT EMC V2022.0.32.0	Nexio	-/-	300004682	ne	-/-	-/-
11	A, B	RF-Amplifier	AMF-6F06001800-30-10P-R	NARDA-MITEQ Inc	2011572	300005241	ev	-/-	-/-
12	A, B	EMI Test Receiver 20Hz- 26,5GHz	ESU26	R&S	100037	300003555	k	11.12.2023	31.12.2024
13	A, B	Power Supply	HMP2020	Rohde & Schwarz	120579	300006406	k	02.05.2023	31.05.2025

7.2 Conducted measurements WLAN EN test system

The EUT's RF signal is coupled out by the antenna connector which is supplied by the manufacturer. The signal is first 10dB attenuated before it is power divided (~6dB loss per branch). One of the signal paths is connected to the companion device, the other one is connected to the spectrum analyzer. The losses for all signal paths are first checked within a calibration. The measurement readings on the signaling unit/spectrum analyzer are corrected by the specific test set-up loss. The attenuator, power divider, signaling unit and the spectrum analyzer are impedance matched on 50 Ohm.



Equipment table:

No.	Setup	Equipment	Type	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	A	EMC-Software TS8997	WMS32 V12.00; K971, -K972, -K973, -K975	Rohde & Schwarz	101467,100770, 100766,-842	300004834	ne	-/-	-/-
2	A	RF-Cable WLAN-Tester Port 1	ST18/SMAm/SMAm /48	Huber & Suhner	Batch no. 1273777	400001249	ev	-/-	-/-
3	A	Open Switch and Control Unit and Power Sensors	OSP120 incl. B157 W8 Plus	Rohde & Schwarz	101115, 100837	300006329	k	13.12.2023	31.12.2024
4	A	Rack mounted PC	Precision 3930 Rack-Workstation i5-9500 CTO	Dell	J15D873	300006115	ne	-/-	-/-

8 Measurement uncertainty

Measurement uncertainty	
Test case	Uncertainty
Antenna gain	± 3 dB
Occupied BW (20MHz Ref BW)	2.24 E+05 Hz
RF output power	0.349 dB
Power Timing (HW Timing Error)	< 500ns
Power Spectral Density	± 0.22 dB
Transmitter unwanted emissions (< 7GHz)	± 1.65 dB
Transmitter unwanted emissions (> 7GHz)	± 2.59 dB
Spurious emissions radiated 30 MHz to 1 GHz	± 3 dB
Spurious emissions radiated 1 GHz to 12.75 GHz	± 3.7 dB
Spurious emissions radiated above 12.75 GHz	± 4.5 dB
Level accuracy (Blocking Signal)	± 1.24 dB
Level accuracy (Wanted Signal)	± 1.06 dB

9 Summary of measurement results

<input checked="" type="checkbox"/>	No deviations from the technical specifications were ascertained
<input type="checkbox"/>	There were deviations from the technical specifications ascertained
<input checked="" type="checkbox"/>	This test report is only a partial test report. The content and verdict of the performed test cases are listed below.

TC identifier	Description	Verdict	Date	Remark
RF-Testing	ETSI EN 300 328 V2.2.2 (2019-07)	See table!	2025-03-27	Reduced test plan according customer specifications.

Conformance requirement / Technical requirement	Test case	Temperature conditions	Power source voltages	Mode	C	NC	NA	NP	Remark
4.3.2.2 / 5.4.2	RF output power	Nominal	Nominal	DSSS/OFDM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
		Low		-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		High		-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4.3.2.4 / 5.4.2	Duty Cycle, Tx-sequence, Tx-gap	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-/-
4.3.2.5 / 5.4.2	Medium Utilisation	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-/-
4.3.2.3 / 5.4.3	Power Density	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-/-
4.3.2.6 / 5.4.6	Adaptivity (Channel access mechanism)	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-/-
4.3.2.7 / 5.4.7	Occupied Channel Bandwidth	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-/-
4.3.2.8 / 5.4.8	Transmitter unwanted emissions in the out-of-band domain	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-/-
4.3.2.9 / 5.4.9	Transmitter unwanted emissions in the spurious domain	Nominal	Nominal	DSSS/OFDM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
4.3.2.10 / 5.4.10	Receiver spurious emissions	Nominal	Nominal	RX / idle - mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
4.3.2.11 / 5.4.11	Receiver Blocking	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-/-
4.3.2.12	Geo-location	Nominal	Nominal	-/-	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	*1

Note:

C	Compliant	NC	Not compliant
NA	Not applicable	NP	Not performed
*1	For equipment with geo-location capability the manufacturer declares that geographical location determined by the equipment is not accessible to the user.		

10 Additional comments

Reference documents: CIB-CCU3_Measurements_C0 sample_Information for homologation.pptx
CIBCCU3_Homologation instructions.pdf

Special test descriptions: None

Configuration descriptions: Operating mode vs. data rate vs. power setting:

Test mode:	Data rate:	Power setting:
b-mode (CDD)	1	11
g-mode (CDD)	6	11
n20-mode (SDM)	MCS16	11
n40-mode (SDM)	MCS16	11

EUT selection: ☐ Only one device available
☐ Devices selected by the customer
☒ Devices selected by the laboratory (Randomly)

Provided channels:

Channels with 20 MHz channel bandwidth:

Channel number & Center frequency													
Channel	1	2	3	4	5	6	7	8	9	10	11	12	13
f _c / MHz	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462	2467	2472

Channels with 40 MHz channel bandwidth:

Channel number & Center frequency													
Channel	-/-	-/-	3	4	5	6	7	8	9	10	11	-/-	-/-
f _c / MHz	-/-	-/-	2422	2427	2432	2437	2442	2447	2452	2457	2462	-/-	-/-

Note: The channels used for the tests are marked in bold in the list.

11 Additional EUT parameter

- Test mode:
- ☐ No test mode available
Iperf was used to transmit data to another device with the largest support packet size
- ☒ Test mode available
Special software is used.
EUT is transmitting pseudo random data by itself
- Modulation types:
- ☒ Wide Band Modulation (None Hopping – e.g. DSSS, OFDM)
- ☐ Frequency Hopping Spread Spectrum (FHSS)
- Adaptive equipment:
- ☒ Yes
- ☐ Yes (but can be disabled)
- ☐ No
- Receiver category:
- ☒ Category 1: Adaptive equipment with a maximum RF output power greater than 10 dBm e.i.r.p.
- ☐ Category 2: Non-adaptive equipment with a Medium Utilization (MU) factor greater than 1 % and less than or equal to 10 % or adaptive equipment with a maximum RF output power of 10 dBm e.i.r.p.
- ☐ Category 3: Non-adaptive equipment with a maximum Medium Utilization (MU) factor of 1 % or adaptive equipment with a maximum RF output power of 0 dBm e.i.r.p.
- Antennas and transmit operating modes:
- ☒ Operating mode 1 (single antenna)
- Equipment with 1 antenna,
 - Equipment with 2 diversity antennas operating in switched diversity mode by which at any moment in time only 1 antenna is used,
 - Smart antenna system with 2 or more transmit/receive chains, but operating in a mode where only 1 transmit/receive chain is used)
- ☐ Operating mode 2 (multiple antennas, no beamforming)
- Equipment operating in this mode contains a smart antenna system using two or more transmit/receive chains simultaneously but without beamforming.
- ☐ Operating mode 3 (multiple antennas, with beamforming)
- Equipment operating in this mode contains a smart antenna system using two or more transmit/receive chains simultaneously with beamforming.
In addition to the antenna assembly gain (G), the beamforming gain (Y) may have to be taken into account when performing the measurements.

12 Measurement results

12.1 Antenna gain

Limits:

No restriction!

Results: Extracted from applicant antenna information

	Low channel (2402 MHz)	Mid channel (2440 MHz)	High channel (2480 MHz)
Gain [dBi] Declared	4.3	3.6	2.7

12.2 RF conducted & radiated output power

Description:

The RF output power is defined as the mean equivalent isotropic radiated power (E.I.R.P.) of the equipment during a transmission burst.

Measurement:

Measurement parameter	
Measured with fast power sensor(s)	
Test setup:	See sub clause 7.2 – A
Measurement uncertainty	See sub clause 8

Performed: ☒ Conducted
☐ Radiated (only if no conducted sample is provided)

Limits:

For adaptive equipment	20 dBm
For non-adaptive equipment	Declared by the supplier and shall not exceed 20dBm

Results: DSSS / b – mode

TEST CONDITIONS		Maximum conducted burst power in 10 measured bursts [dBm] including antenna gain					
b-mode		Lowest channel		Middle channel		Highest channel	
T_{nom}	V_{nom}	rad*	14.2	rad*	14.3	rad*	14.2

Results: OFDM / g – mode

TEST CONDITIONS		Maximum conducted burst power in 10 measured bursts [dBm] including antenna gain					
g-mode		Lowest channel		Middle channel		Highest channel	
T_{nom}	V_{nom}	rad*	14.8	rad*	14.8	rad*	14.7

Results: OFDM / n20 – mode

TEST CONDITIONS		Maximum conducted burst power in 10 measured bursts [dBm] including antenna gain					
n20-mode		Lowest channel		Middle channel		Highest channel	
T_{nom}	V_{nom}	rad*	14.9	rad*	14.8	rad*	14.7

Results: OFDM / n40 – mode

TEST CONDITIONS		Maximum conducted burst power in 10 measured bursts [dBm] including antenna gain					
N40-mode		Lowest channel		Middle channel		Highest channel	
T_{nom}	V_{nom}	rad*	15.3	rad*	15.5	rad*	15.1

*Calculated values = conducted power + max. antenna gain

12.3 Transmitter unwanted emissions in the spurious domain

Description:

Transmitter unwanted emissions in the spurious domain are emissions outside the allocated band and outside the Out-of-band Domain when the equipment is in Transmit mode.

Measurement:

Pre-scan:

Measurement parameters	
Detector	Peak
Sweep time	1s
Resolution bandwidth	Below 1 GHz: 100 kHz / above 1MHz
Video bandwidth	Below 1 GHz: 300 kHz / above 3MHz
Trace mode	Max hold
Test setup	See sub clause 7.1 – A (radiated)
Measurement uncertainty	See sub clause 8

Retest:

Measurement parameters	
Detector	RMS
Measurement mode	Time domain power (TDP)
Sweep time	500ms
Resolution bandwidth	Below 1 GHz: 100 kHz / above 1MHz
Video bandwidth	Below 1 GHz: 300 kHz / above 3MHz
Span	Zero span
Trace mode	Max hold
Test setup	See sub clause 7.1 – A (radiated)
Measurement uncertainty	See sub clause 8

Performed: ☐ Conducted
☒ Radiated

Limits:

State	Max. spurious level		
	47 MHz to 74 MHz 87.5 MHz to 118 MHz 174 MHz to 230 MHz 470 MHz to 694 MHz	Other frequencies ≤ 1000 MHz	All frequencies > 1000 MHz
Operating	4.0 nW (-54 dBm)	250 nW (-36 dBm)	1.00 µW (-30 dBm)
Standby	2.0 nW (-57 dBm)	2.0 nW (-57 dBm)	20.0 nW (-47 dBm)

Results: radiated, DSSS / b - mode

Lowest channel				Highest channel			
f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]	f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]
4824	-35.9	-30.0	5.9	4944	-35.3	-30.0	5.3

Results: radiated, OFDM / g - mode

Lowest channel				Highest channel			
f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]	f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]
4821	-45.1	-30.0	15.1	4943	-44.0	-30.0	14.0

Results: radiated, OFDM / n HT20 - mode

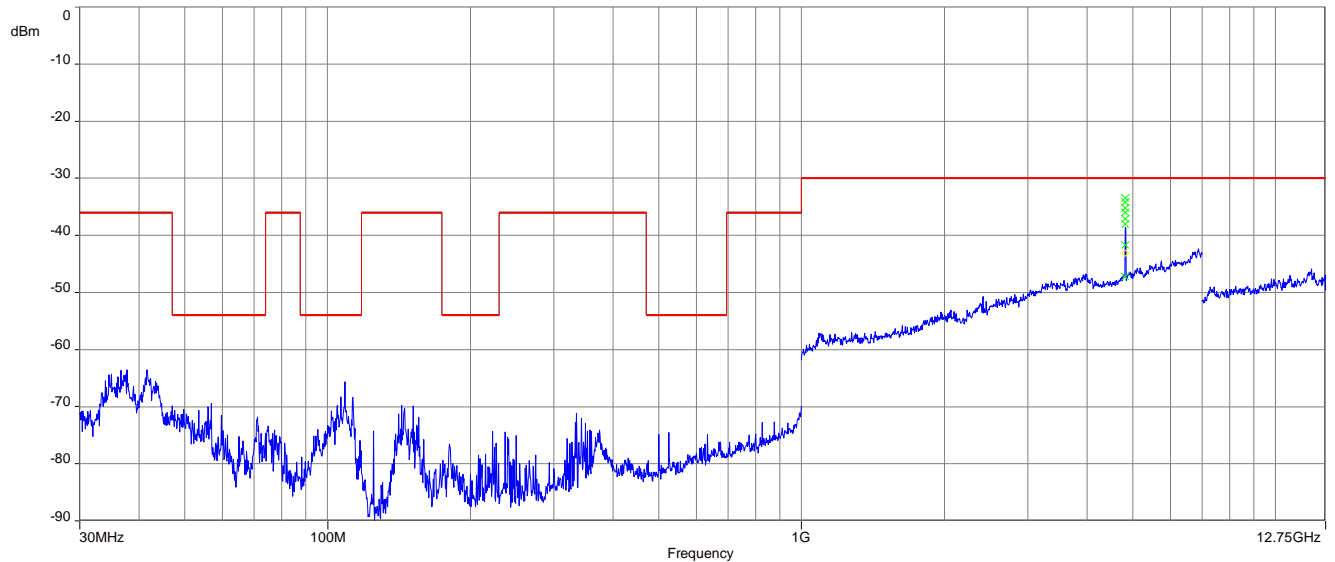
Lowest channel				Highest channel			
f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]	f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]
4824	-45.1	-30.0	15.1	4943	-44.0	-30.0	14.0

Results: radiated, OFDM / n HT40 - mode

Lowest channel				Highest channel			
f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]	f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]
4831	-50.3	-30.0	20.3	-/-	-/-	-/-	-/-

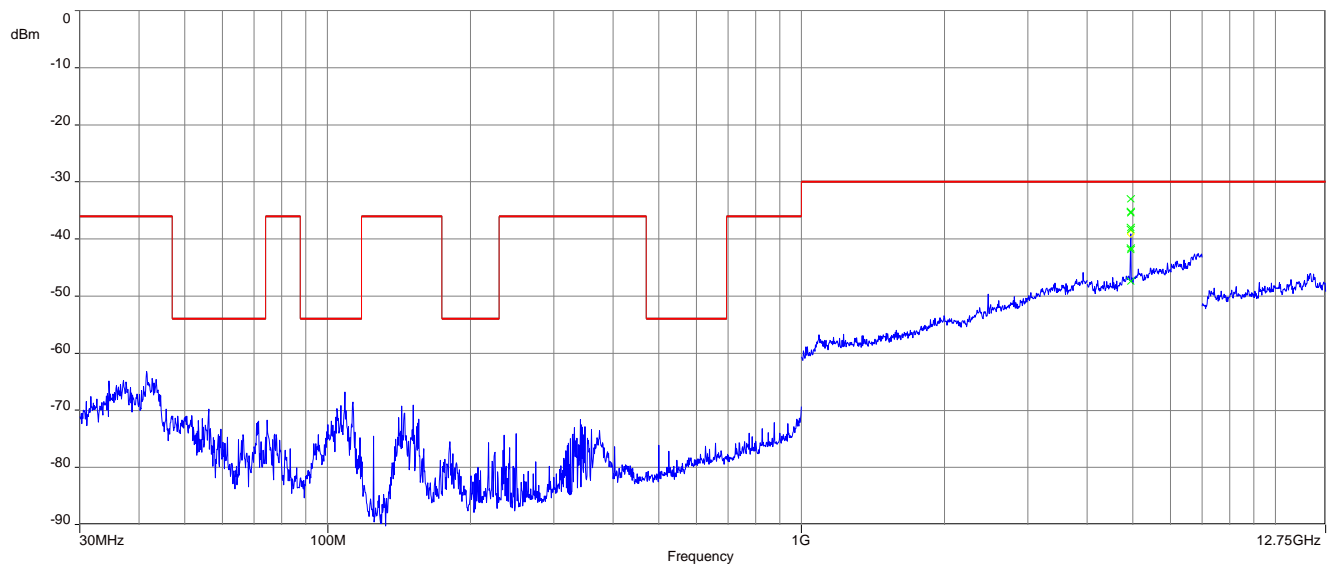
Plots: radiated DSSS / b - mode

Plot 1: 30 MHz to 12.75 GHz lowest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

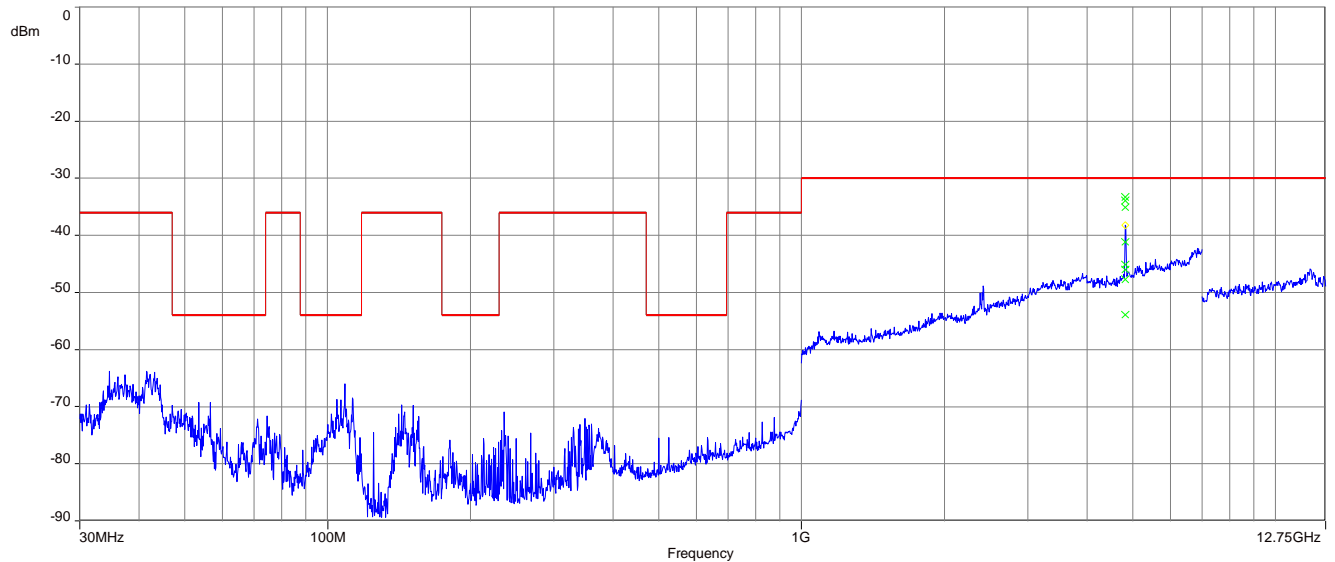
Plot 2: 30 MHz to 12.75 GHz, highest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

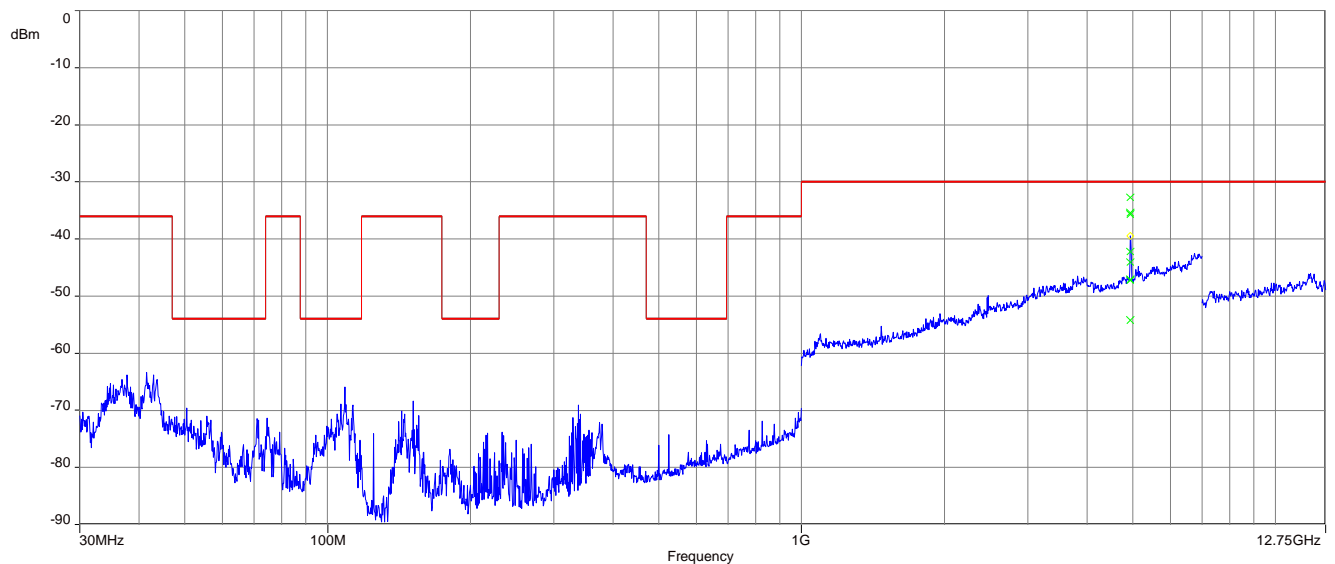
Plots: radiated OFDM / g - mode

Plot 1: 30 MHz to 12.75 GHz lowest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

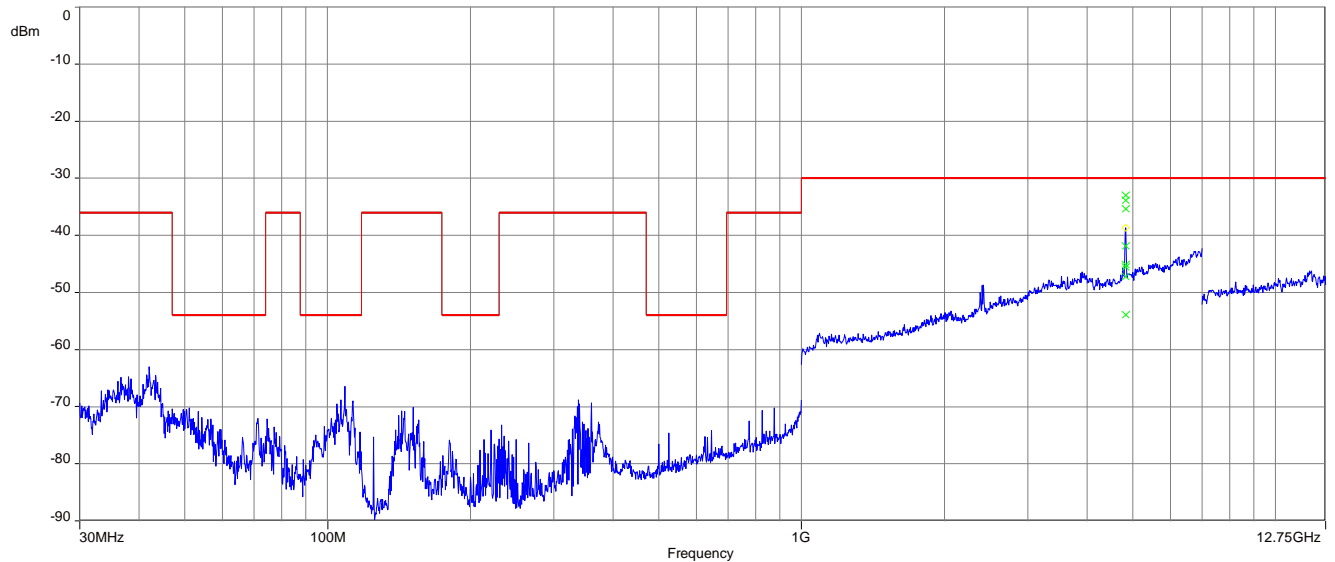
Plot 2: 30 MHz to 12.75 GHz, highest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

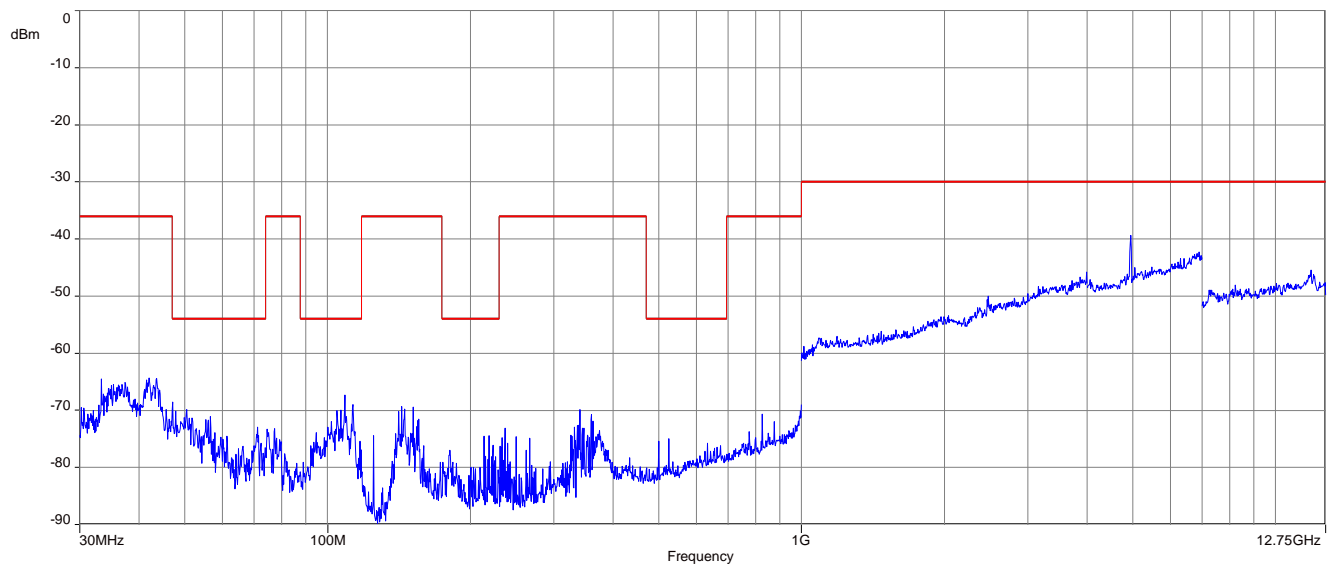
Plots: radiated OFDM / n HT20 - mode

Plot 1: 30 MHz to 12.75 GHz lowest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

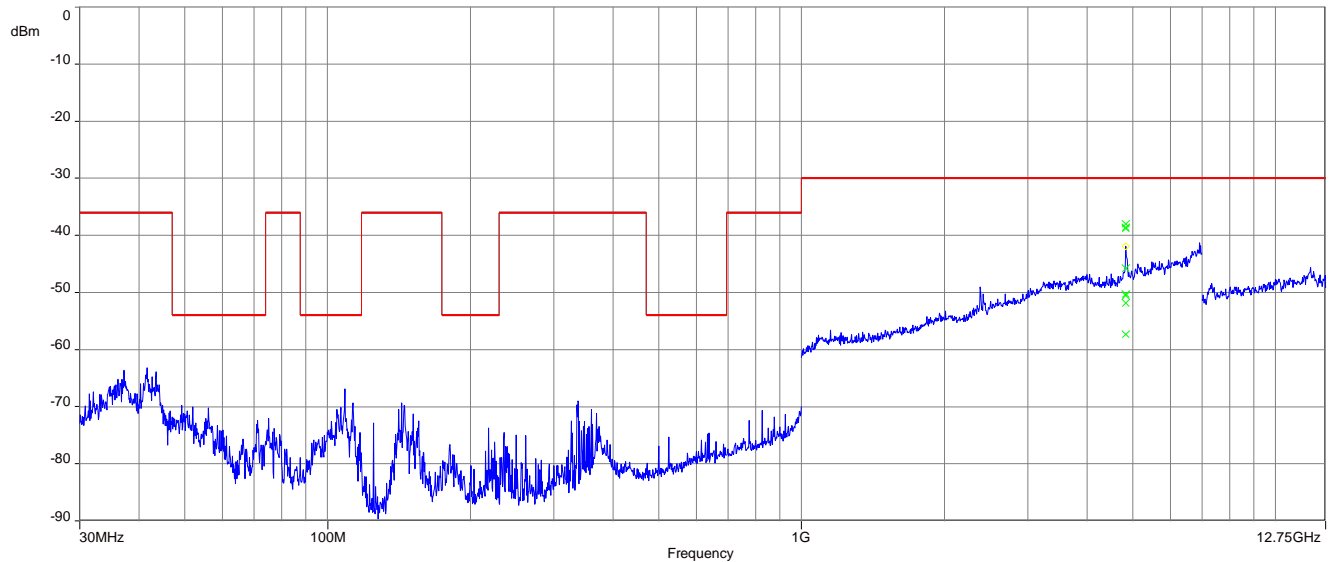
Plot 2: 30 MHz to 12.75 GHz, highest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

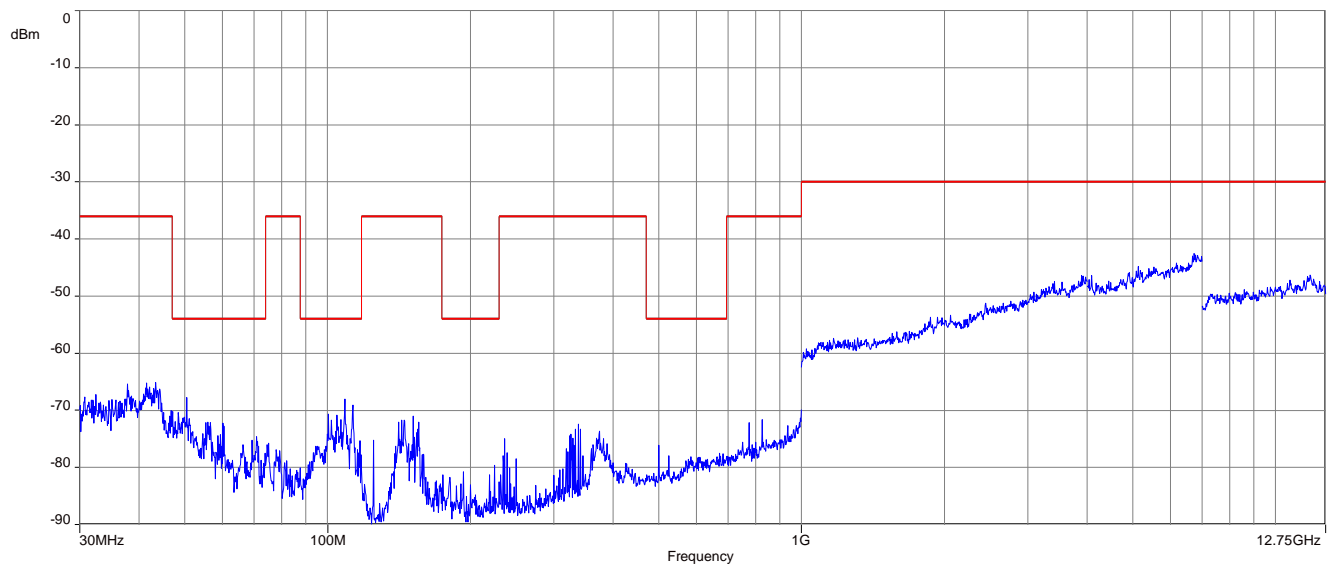
Plots: radiated OFDM / n HT40 - mode

Plot 1: 30 MHz to 12.75 GHz lowest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

Plot 2: 30 MHz to 12.75 GHz, highest channel, vertical & horizontal polarization



The carrier signal is notched with a 2.4 GHz band rejection filter.

12.4 Receiver spurious emissions

Description:

Receiver spurious emissions are emissions at any frequency when the equipment is in receive mode.

Measurement:

Measurement parameter	
Detector:	RMS
Video bandwidth:	Below 1 GHz: 300 kHz Above 1 GHz: 3 MHz
Resolution bandwidth:	Below 1 GHz: 100 kHz Above 1 GHz: 1 MHz
Sweep time:	Auto
Trace mode:	Max Hold
Test setup	See sub clause 7.1 – B (radiated)
Measurement uncertainty	See sub clause 8

Performed: ☐ Conducted
☒ Radiated

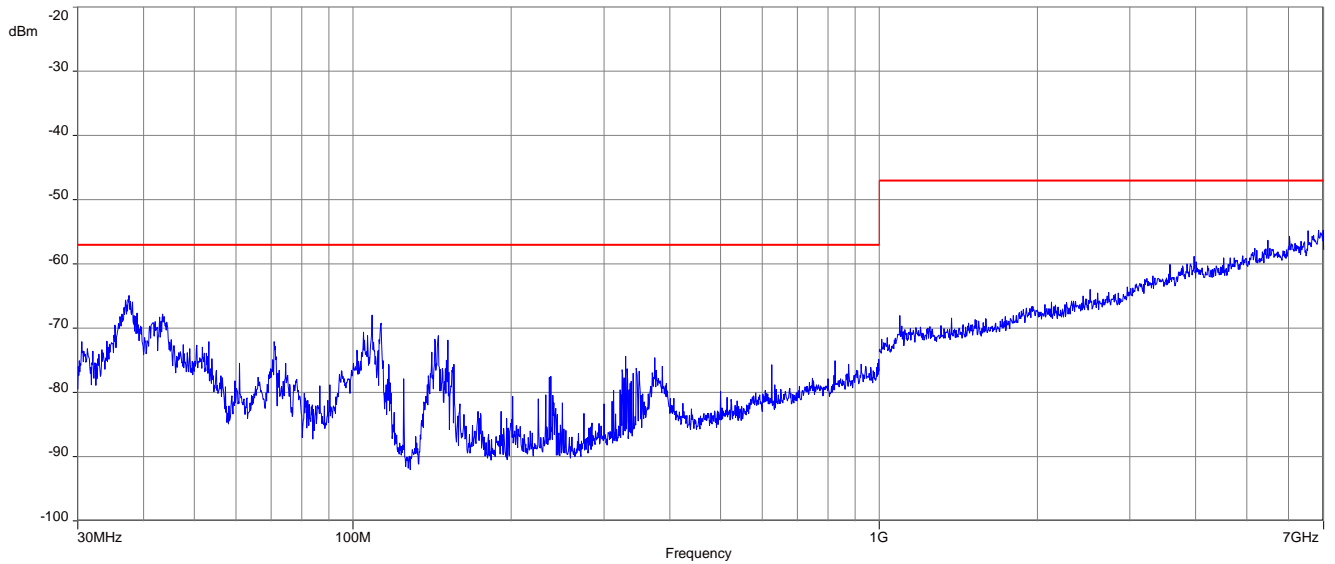
Limits:

Frequency range	Narrowband spurious emission
30 MHz - 1 GHz	-57 dBm
above 1 GHz - 12.75 GHz	-47 dBm

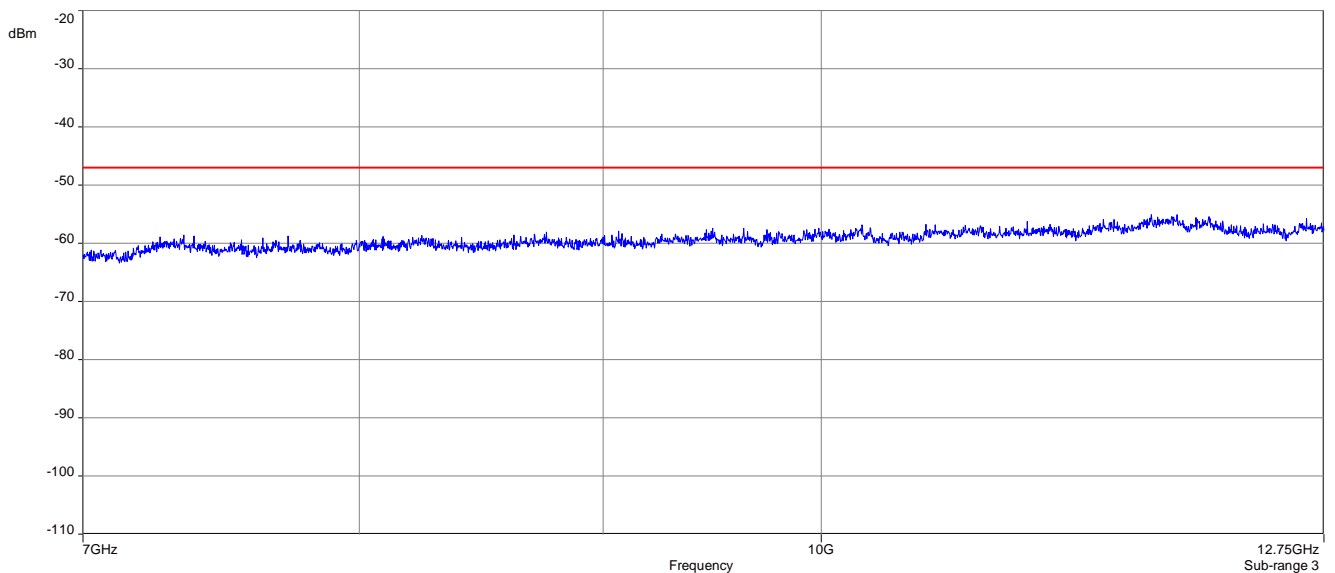
Results: radiated

RX mode			
f [MHz]	Level [dBm]	Limit [dBm]	Margin [dBm]
All detected peaks are more than 6 dB below the limit			

Plot 1: 30 MHz to 7 GHz, radiated, vertical & horizontal polarization RX mode, valid for both channels



Plot 2: 7 GHz to 12.75 GHz, radiated, vertical & horizontal polarization RX mode, valid for both channels



13 Glossary

AVG	Average
C	Compliant
C/N₀	Carrier to noise-density ratio, expressed in dB-Hz
CAC	Channel availability check
CW	Clean wave
DC	Duty cycle
DFS	Dynamic frequency selection
DSSS	Dynamic sequence spread spectrum
DUT	Device under test
EN	European Standard
ETSI	European Telecommunications Standards Institute
EMC	Electromagnetic Compatibility
EUT	Equipment under test
FCC	Federal Communications Commission
FCC ID	Company Identifier at FCC
FHSS	Frequency hopping spread spectrum
FVIN	Firmware version identification number
GNSS	Global Navigation Satellite System
GUE	GNSS User Equipment
HMN	Host marketing name
HVIN	Hardware version identification number
HW	Hardware
IC	Industry Canada
Inv. No.	Inventory number
MC	Modulated carrier
NA	Not applicable
NC	Not compliant
NOP	Non occupancy period
NP	Not performed
OBW	Occupied bandwidth
OC	Operating channel
OCW	Operating channel bandwidth
OFDM	Orthogonal frequency division multiplexing
OOB	Out of band
OP	Occupancy period
PER	Packet error rate
PMN	Product marketing name
PP	Positive peak
QP	Quasi peak
RLAN	Radio local area network
S/N or SN	Serial number
SW	Software
UUT	Unit under test
WLAN	Wireless local area network

14 Document history

Version	Applied changes	Date of release
R01	Initial release	2025-03-27

END OF TEST REPORT