

ISED CABid: ES1909
Lab. Company Number: 4621A

Test Report No:
76719RRF.007

Partial Test Report

USA FCC Part 15.31(h), 15.209, 15.247, 15.407

| | |
|---|--|
| (*) Identification of item tested | Central In-Vehicle Infotainment Computer CIVIC Gen20xi.3 |
| (*) Trademark | BOSCH |
| (*) Model and / or type reference | BCI3L3R1 / vehicular architecture: Star3.0 |
| (*) Derived model not tested | BCI3L3R1 / vehicular architecture: Star3.5 |
| Other identification of the product | FCC ID: 2AUXS-BCI3L3R1 |
| (*) Features | AM/FM/DAB(SXM US version)(/TV JP Version) W-LAN 2.4GHz /5GHz MIMO / SiSO - no DFS Bands, AP / Client Bluetooth 5.2 LE& EDR GNSS multiple HW version: D5 SW version: E064.4 |
| Applicant | Robert Bosch GmbH Robert-Bosch-Strasse 200 31139, Hildesheim Germany |
| Test method requested, standard | USA FCC Part 15.31 (10-1-21) Edition: Measurement standards. USA FCC Part 15.209 (10-1-21) Edition: Radiated emission limits; general requirements. USA FCC Part 15.247 (10-1-21) Edition: Operation within the bands 902 - 928 MHz, 2400 -2483.5 MHz, and 5725 - 5850 MHz. USA FCC Part 15.407 (10-1-21) Edition: Unlicensed National Information Infrastructure (U-NII) Devices. General technical requirements. Guidance for Performing Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid Systems Devices Operating Under Section 15.247 of the FCC Rules. 558074 D01 Meas Guidance v05r02 dated April 2, 2019. Guidance for Emission Testing of Transmitters with Multiple Outputs in the Same Band 662911 D01 Multiple Transmitter Output v02r01 dated 10/31/2013. Guidance for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices 789033 D02 General U-NII Test Procedures New Rules v02r01 dated Dec 14, 2017 ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices. |
| Approved by (name / position & signature) | José Manuel Gómez Galván EMC Consumer & RF Lab. Manager |
| Date of issue | 2025-06-04 |

Report template No

FDT08_25

(*) "Data provided by the client"

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Competences and guarantees

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Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Testing and Certification S.A.U. internal document PODT000.

Data provided by the client

The following data has been provided by the client:

1. Information relating to the description of the sample ("Identification of the item tested", "Trademark", "Model and/or type reference tested").
2. The sample consists of a Central In-Vehicle Infotainment Computer CIVIC Gen20xi.3

Including:

GNSS (GPS, Galileo Beidou Glonass)

AM/FM/DAB (ROW/ECE)

AM/FM/SXM (NA)

AM/FM/TV (JP)

WLAN 2.4 &5GHz

Bluetooth

3. Declaration of similarity

Cross-Domain Computing Solutions



To whom it may concern

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FCC BCI3L3R1 - Product Variant Declaration Star 3.0 vs Star 3.5

May 13, 2025

Ladies and gentlemen,

We, Robert Bosch GmbH, herewith declare that our product **BCI3L3R1** exists in two variants, which are electrical identical in all aspects.

| | |
|-------------------|----------------|
| HVIN (Model Name) | BCI3L3R1 |
| FCC ID: | 2AUXS-BCI3L3R1 |

The product is mounted in two different vehicle types:

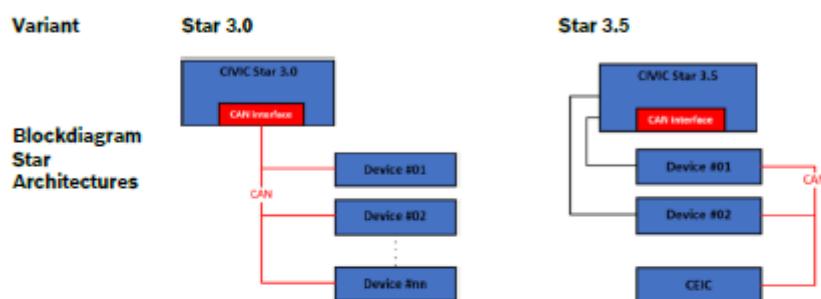
- one with a CAN Bus Vehicle communication system,
- the other one has vehicular Ethernet as communication system

In order to be operational in these vehicles, our product is preconfigured in two variants as described below. Both are **HW identical**, only that different path for in-vehicle communication is used.

The CAN and Ethernet interface are always built on both Star architectures, but only Star 3.0 uses the CAN interface, and Star 3.5 uses Ethernet interface.

The following block diagrams show the architectures:

Registered Office: Stuttgart, Registration Court: Amtsgericht Stuttgart, HRB 14000;
Chairman of the Supervisory Board: Prof. Dr. Stefan Asenkerschbaumer;
Managing Directors: Dr. Stefan Hartung, Dr. Christian Fischer, Dr. Markus Forschner,
Stefan Grosch, Dr. Markus Heyn, Dr. Frank Meyer, Katja von Raven, Dr. Tanja Rückert



From regulatory point of view, we, BOSCH, consider the impact of the variant coding as follows:

| | CAN Bus / Ethernet Bus |
|--------------------------------|------------------------|
| Radio Requirements | No impact |
| Health Requirements | No impact |
| Electrical Safety Requirements | No impact |
| EMC Requirements | Radiated emissions |

Yours sincerely

Dirk_Zam

Digitally signed by
Dirk_Zamow
Date: 2025.05.14
08:34:48 +02'00'

By: Dirk Zamow
Title: Grantee Main Contact
Telephone: +49 5121 49 2608
e-mail: dirk.zamow@de.bosch.com

DEKRA Testing and Certification S.A.U. declines any responsibility with respect to the information provided by the client and that may affect the validity of results. The laboratory is not responsible for such information and it is not covered by accreditation.

Usage of samples

Samples undergoing test have been selected by: The client.

| Id | Control Number | Description | Model | Serial Nº | Date of Reception | Application |
|------|----------------|--------------------------------|----------|----------------|-------------------|-----------------------|
| S/01 | 76719D_149.1 | Headunit A- PREMIUM ECE | BCI3L3R1 | CM0203R0015425 | 2024-10-25 | Element Under Test |
| S/01 | 76719D_48.1 | Fakra- USB adapter cable | -- | -- | 2024-10-25 | Auxiliary Element |
| S/01 | 76719D_60.1 | Termination box | -- | -- | 2024-10-25 | Auxiliary Element |
| S/01 | 76719D_63.1 | Fakra- 4 SMA cable | -- | -- | 2024-10-25 | Auxiliary Element |
| S/01 | 76719D_111.1 | Harness | -- | -- | 2024-10-25 | Auxiliary Element |

| Id | Type |
|------|---|
| S/01 | Samples used for radiated test A spotcheck has been performed to determine the worst case regarding the vehicular architecture |

Test sample description

| Ports..... | Port name and description | Cable | | | | | |
|---|---|--|----------------------|--------------|--------------|---|----|
| | | Specified max length [m] | Attached during test | Shielded | | | |
| | <i>Main Connector</i> | 2m | [X] | [] | [] | | |
| | <i>Fakra Quad Connector AM/FM/DAB</i> | | [X] | [] | [] | | |
| | <i>Fakra Single Connector GPS</i> | | | | | | |
| | <i>Fakra Quad Connector WLAN/BT</i> | | [X] | [] | [] | | |
| | <i>USB Cable</i> | | [X] | [] | [] | | |
| Supplementary information to the ports..... | -- | | | | | | |
| Rated power supply | Voltage and Frequency | | Reference poles | | | | |
| | [] | AC: | L1 | L2 | L3 | N | PE |
| | [X] | DC: 9-16V nominal 12 VDC by vehicle battery | | | | | |
| Rated Power | -- | | | | | | |
| Clock frequencies..... | -- | | | | | | |
| Other parameters | IP20 ; -40C toi +65C | | | | | | |
| Software version | E064.4 | | | | | | |
| Hardware version | D5 | | | | | | |
| Dimensions in cm (W x H x D) | 220mmx161mmx78mm | | | | | | |
| Mounting position | [] | Table top equipment | | | | | |
| | [] | Wall/Ceiling mounted equipment | | | | | |
| | [] | Floor standing equipment | | | | | |
| | [] | Hand-held equipment | | | | | |
| | [X] | Other: Cluster in the car with separate antennas built into the cockpit of vehicle | | | | | |
| Modules/parts..... | Module/parts of test item | | | Type | Manufacturer | | |
| | -- | | | | | | |
| Accessories (not part of the test item) | Description | | Type | Manufacturer | | | |
| | Antennas | | | | | | |
| | Display | | | | | | |
| | any other equipment to make device functional | | | | | | |
| | Laptop | | | | | | |
| Documents as provided by the applicant | Description | | File name | Issue date | | | |
| | -- | | | | | | |

Identification of the client

Robert Bosch GmbH
Robert-Bosch-Strasse 200
31139, Hildesheim, Germany

Testing period and place

| | |
|---------------|--|
| Test Location | DEKRA Testing and Certification S.A.U. |
| Date (start) | 2025-05-20 |
| Date (finish) | 2025-05-21 |

Document history

| Report number | Date | Description |
|---------------|------------|----------------|
| 76719RRF.007 | 2025-06-04 | First release. |

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

| | |
|-------------------|------------------------------|
| Temperature | Min. = 15 °C Max. = 35 °C |
| Relative humidity | Min. = 20 % Max. = 75 % |

In the semianechoic chamber, the following limits were not exceeded during the test.

| | |
|-------------------|------------------------------|
| Temperature | Min. = 15 °C Max. = 35 °C |
| Relative humidity | Min. = 20 % Max. = 75 % |

In the chamber for conducted measurements, the following limits were not exceeded during the test:

| | |
|-------------------|------------------------------|
| Temperature | Min. = 15 °C Max. = 35 °C |
| Relative humidity | Min. = 20 % Max. = 75 % |

Remarks and comments

The tests have been performed by the technical personnel: Alvaro Gutierrez.

Used instrumentation:

| Control No. | Equipment | Model | Manufacturer | Next Calibration |
|-------------|--|-------------------|-----------------------------|------------------|
| 04825 | SEMIANECHOIC ABSORBER LINED CHAMBER | FACT 3 200 STP | ETS LINDGREN | N/A |
| 04826 | SHIELDED ROOM | S101 | ETS LINDGREN | N/A |
| 07547 | TEMPERATURE AND HUMIDITY PROBE | HWg-STE | HW GROUP | 2026-04-22 |
| 07548 | TEMPERATURE AND HUMIDITY PROBE | HWg-STE | HW GROUP | 2026-04-22 |
| 04578 | HYBRID BILOG ANTENNA 30MHz-6GHz | 3142E | ETS LINDGREN | 2026-06-01 |
| 07611 | PREAMPLIFIER BOX | -- | INTERNAL | 2026-01-23 |
| 06165 | EMI TEST RECEIVER 9kHz-7GHz | ESR7 | ROHDE AND SCHWARZ | 2025-12-27 |
| 04611 | HORN ANTENNA 1-18GHz | BBHA 9120 D | SCHWARZBECK MESS-ELEKTRONIK | 2026-01-16 |
| 05705 | PRE-AMPLIFIER G>40dB 1-18 GHz | BLMA 0118-1M | BONN ELEKTRONIK | 2025-07-18 |
| 04657 | HORN ANTENNA 18-40GHz | BBHA 9170 | SCHWARZBECK | 2026-06-12 |
| 10573 | PRE-AMPLIFIER G>46dB 18-40 GHz | BLMA 1840-5G | BONN ELEKTRONIK | 2026-03-07 |
| 04716 | SIGNAL AND SPECTRUM ANALYZER 2Hz-50GHz | FSW50 | ROHDE AND SCHWARZ | 2026-08-02 |
| 09762 | DC POWER SUPPLY 200V/25A | EA-PSI-9200-25-DT | ELEKTRO-AUTOMATIC | N/A |
| 05850 | DIGITAL MULTIMETER | 179 | FLUKE | 2025-11-04 |
| 04848 | SOFTWARE FOR EMC/RF TESTING | EMC32 | ROHDE AND SCHWARZ | N/A |
| 06793 | SHIELDED ROOM | S101 | ETS LINDGREN | N/A |
| 06611 | TEMPERATURE AND HUMIDITY PROBE | HWg-STE | HW GROUP | 2026-04-21 |
| 04716 | SIGNAL AND SPECTRUM ANALYZER 2Hz-50GHz | FSW50 | ROHDE AND SCHWARZ | 2026-08-02 |
| 00915 | SIGNAL GENERATOR 10MHz-18GHz | SWM05 | ROHDE AND SCHWARZ | 2026-12-04 |
| 08002 | TEMPERATURE CHAMBER MK56 BINDER | MK 56 | BINDER | 2026-02-12 |
| 07798 | WMS32 | WMS32 | ROHDE AND SCHWARZ | N/A |
| 00922 | POWER SUPPLY DC 40 V / 40 A | NGPE 40/40 | ROHDE AND SCHWARZ | 2027-10-02 |

| Control No. | Equipment | Model | Manufacturer | Next Calibration |
|-------------|--------------------|-------|--------------|------------------|
| 07758 | DIGITAL MULTIMETER | 175 | FLUKE | 2025-11-07 |

Testing verdicts

| | |
|-----------------|-----|
| Not applicable: | N/A |
| Pass: | P |
| Fail: | F |
| Not measured: | N/M |

Summary

| FCC PART 15 PARAGRAPH | | |
|--|---------|--------|
| Requirement – Test case | Verdict | Remark |
| FCC 15.31 (h), 15.209 (a), 15.247 (d), 15.407 (b) - Emission limitations radiated (Transmitter) | P | (1) |
| <u>Supplementary information and remarks:</u> | | |
| (1) Only simultaneous transmission radiated spurious emission test was requested. | | |

Appendix A: Tests results.

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| FCC 15.31 (h), 15.209 (a), 15.247 (d), 15.407 (b) Emission limitations radiated (Transmitter) | 18 |

TEST CONDITIONS

(*) Declared by the Client.

POWER SUPPLY (*):

Vnominal: 12 Vdc
Type of Power Supply: Battery.

ANTENNA (*):

| Technologies | Antenna Gain | Type of Antenna |
|-----------------------|--------------|-----------------|
| BT EDR (Port 3) | 0.1 dBi | External |
| BT LE (Port 3) | 0.1 dBi | External |
| WLAN 2.4 GHz (Port 4) | 0.1 dBi | External |
| WLAN 5 GHz (Port 3) | 5.1 dBi | External |
| WLAN 5 GHz (Port 4) | 5.1 dBi | External |

RADIOS AND CHANNELS TESTED (worst-cases):

* Simultaneous Transmission Bluetooth LE, WLAN 2.4 GHz (SISO), WLAN 5 GHz (band U-NII-1 MIMO, band U-NII-3 MIMO):

| | | |
|-------------------|----------------------|-------------------------|
| | Bluetooth EDR / DSS | |
| Mode: | 8DPSK | |
| Channel Spacing: | 1 MHz | |
| Frequency Range: | 2402 MHz to 2480 MHz | |
| Transmit Channels | Channel | Channel Frequency (MHz) |
| | Low | 2402 |

| | | |
|-------------------|---|-------------------------|
| | WLAN 2.4 GHz (IEEE 802.11 b/g/n20/ax20) / DTS | |
| Mode: | 802.11 b20 | |
| Channel Spacing: | 20 MHz | |
| Frequency Range: | 2402 MHz to 2480 MHz | |
| Transmit Channels | Channel | Channel Frequency (MHz) |
| | Low | 2412 |

| | | |
|-------------------|--|-------------------------|
| | WLAN 5 GHz (IEEE 802.11 a20/n2040/ac204080/ax204080) / U-NII-1 WLAN 5 GHz (IEEE 802.11 a20/n2040/ac204080/ax204080) / U-NII-3 | |
| Mode: | 802.11 n40: index MSC0. MIMO. | |
| Frequency Range: | 5150 MHz to 5250 MHz | |
| Channel Spacing: | 40 MHz | |
| Transmit Channels | Channel | Channel Frequency (MHz) |
| | Low | 5180 |

The test set-up was made in accordance to the general provisions of FCC DTS Measurement 558074 D01 DTS Meas Guidance v05r2 dated April 2, 2019 and FCC Unlicensed National Information Infrastructure (U-NII) Devices 789033 D02 General U-NII Test Procedures New Rules v02r01 dated Dec 14, 2017.

The EUT was tested in the following operating mode:

- Continuous transmission with a modulated carrier at maximum power in all required channels selecting the supported data rates/modulations types.

During transmitter test the EUT was being controlled by the SW tool to operate in a continuous transmit mode on the test channel as required and in each of the different modulation modes.

Selected Transmission Mode for each Radio:

The following configurations were selected based on preliminary testing that identified those corresponding to the worst-cases:

* Bluetooth EDR: Transmitter radiated spurious emissions tests were performed with the EUT transmitting in BT EDR mode configuration as this mode was found as the worst-case for conducted output power tests of all Bluetooth modes.

* WLAN 2.4 GHz: Transmitter radiated spurious emissions tests were performed with the EUT transmitting in 802.11 b / 20 mode configuration as this mode was found as the worst-case for conducted output power tests than all the other WLAN 2.4 GHz modes.

* WLAN 5 GHz band U-NII-1: Transmitter radiated spurious emissions tests were performed with the EUT transmitting in 802.11 ac / 40 / MCS0 mode configuration as this mode was found as the worst-case for conducted output power tests than all the other WLAN 5 GHz band U-NII-1 and U-NII-3 modes.

TESTED SIMULTANEOUS TRANSMISSION MODES:

The EUT was configured to simultaneously transmit the following signals at maximum output power:

- **Operation Mode 1: Simultaneous transmission mode BT EDR, WLAN 5 GHz U-NII-1:**
BT EDR: Low Channel (2402MHz). 8DPSK.
WLAN 5 GHz U-NII-1: Low Channel (5180 MHz). MIMO 2x2 802.11 N40. BW: 40 MHz.
- **Operation Mode 2: Simultaneous transmission mode WLAN 2.4 GHz, WLAN 5 GHz U-NII-1:**
WLAN 2.4 GHz: Low Channel (2412 MHz). SISO 802.11 B. BW: 20 MHz
WLAN 5 GHz U-NII-1: Low Channel (5180 MHz). MIMO 2x2 802.11 N40. BW: 40 MHz.
- **Operation Mode 3: Simultaneous transmission mode BT EDR, WLAN 2.4 GHz:**
BT EDR: Low Channel (2402MHz). 8DPSK.
WLAN 2.4 GHz: Low Channel (2412 MHz). SISO 802.11 B. BW: 20 MHz

FCC 15.31 (h), 15.209 (a), 15.247 (d), 15.407 (b)
Emission limitations radiated (Transmitter)

SPECIFICATION:

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)):

| Frequency Range (MHz) | Field strength (μ V/m) | Field strength ($\text{dB}\mu$ V/m) | Measurement distance (m) |
|-----------------------|-----------------------------|--------------------------------------|--------------------------|
| 0.009-0.490 | 2400/F(kHz) | - | 300 |
| 0.490-1.705 | 24000/F(kHz) | - | 30 |
| 1.705 - 30.0 | 30 | - | 30 |
| 30 - 88 | 100 | 40 | 3 |
| 88 - 216 | 150 | 43.5 | 3 |
| 216 - 960 | 200 | 46 | 3 |
| 960 - 25000 | 500 | 54 | 3 |

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit specified when measuring with peak detector function corresponding to 20 dB above the indicated values in the table above.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz (68.23 dB μ V/m at 3 m distance) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

RSS-247. Attenuation below the general field strength limits specified in RSS-Gen is not required.

Method:

The measurement was performed with the EUT inside a semi-anechoic chamber.

The spectrum was scanned from 30 MHz to at least the 10th harmonic of the highest frequency of the co-located radios up to 40 GHz.

The EUT was placed on a non-conductive stand at a 3-meter distance from the measuring antenna for measurements up to 17 GHz and at 1.5-meter distance for measurements above 17 GHz.

Detected emissions were maximized at each frequency by rotating the EUT and adjusting the measuring antenna height and polarization. The maximum meter reading was recorded. Measurements were made in both horizontal and vertical planes of polarization.

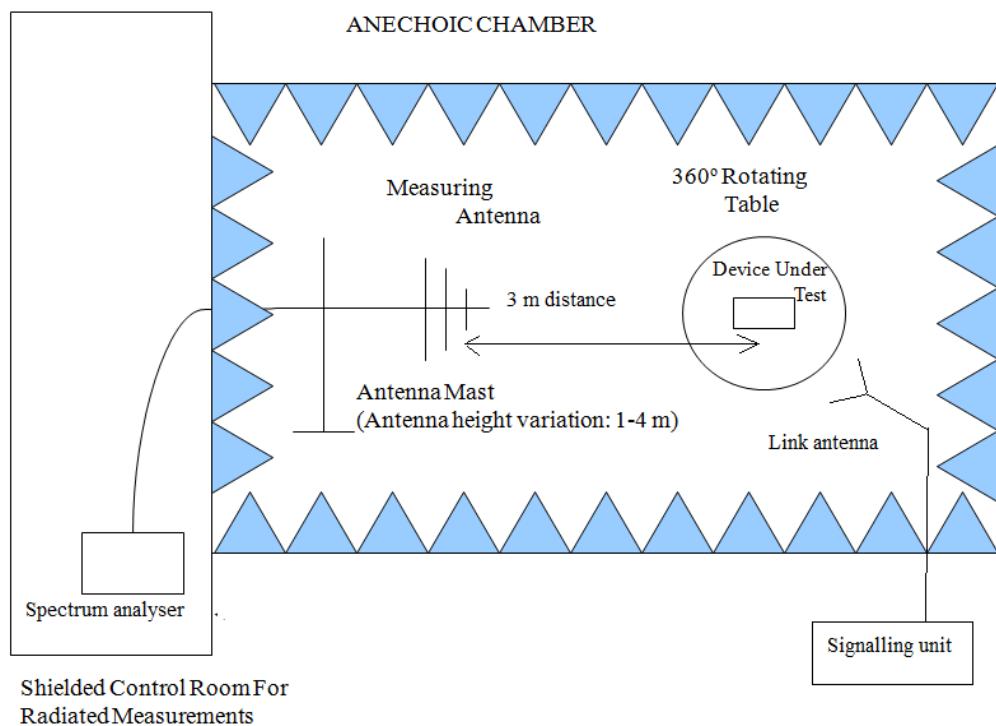
The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

For radiated measurements above 17 GHz performed at a distance closer than the distance specified in standard, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

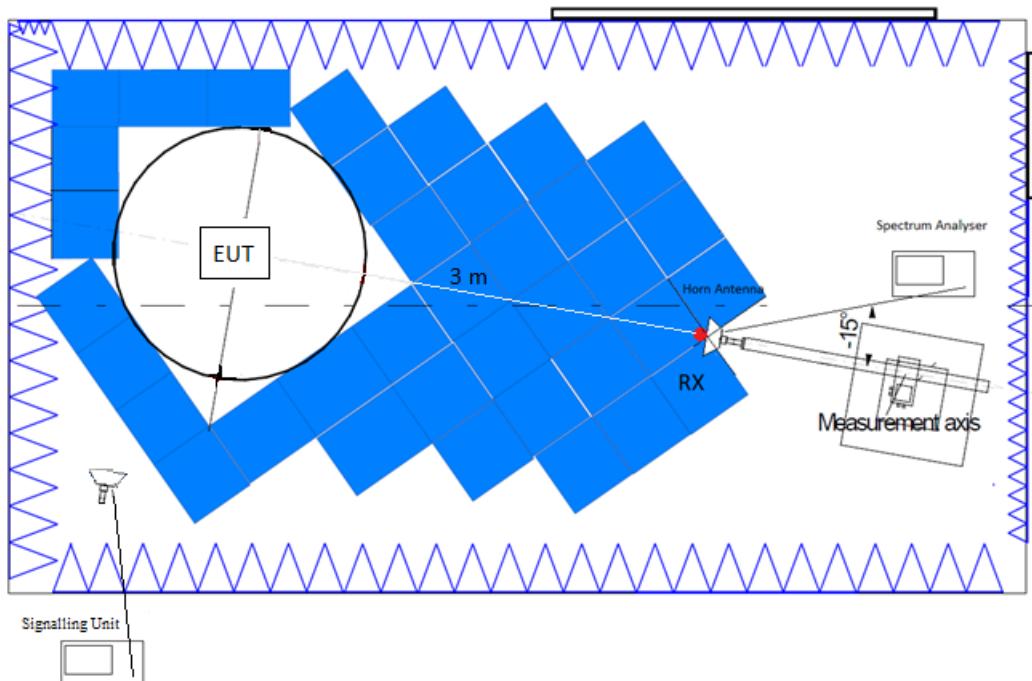
These measurements have been performed in order to check the impact of the Co-Location of all radio interfaces (that can transmit simultaneously).

Test setup:

Radiated measurements below 1 GHz.



Radiated measurements between 1 GHz and 17 GHz.



Results:

- **Operation Mode 1**

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.

Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

Frequency range 30 MHz - 1 GHz

Spurious frequencies detected at less than 20 dB below the limit:

| Frequency (MHz) | QuasiPeak (dB μ V/m) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Pol |
|-----------------|--------------------------|------------------------|----------------------|-----|
| 33.910313 | --- | 30.25 | --- | V |
| 33.910313 | 27.94 | --- | 40.00 | V |
| 40.670000 | --- | 29.58 | --- | V |
| 40.670000 | 27.87 | --- | 40.00 | V |
| 43.337500 | 13.86 | --- | 40.00 | V |
| 43.337500 | --- | 18.65 | --- | V |

Frequency range 1 - 40 GHz

No spurious frequencies at less than 20 dB below the limit.

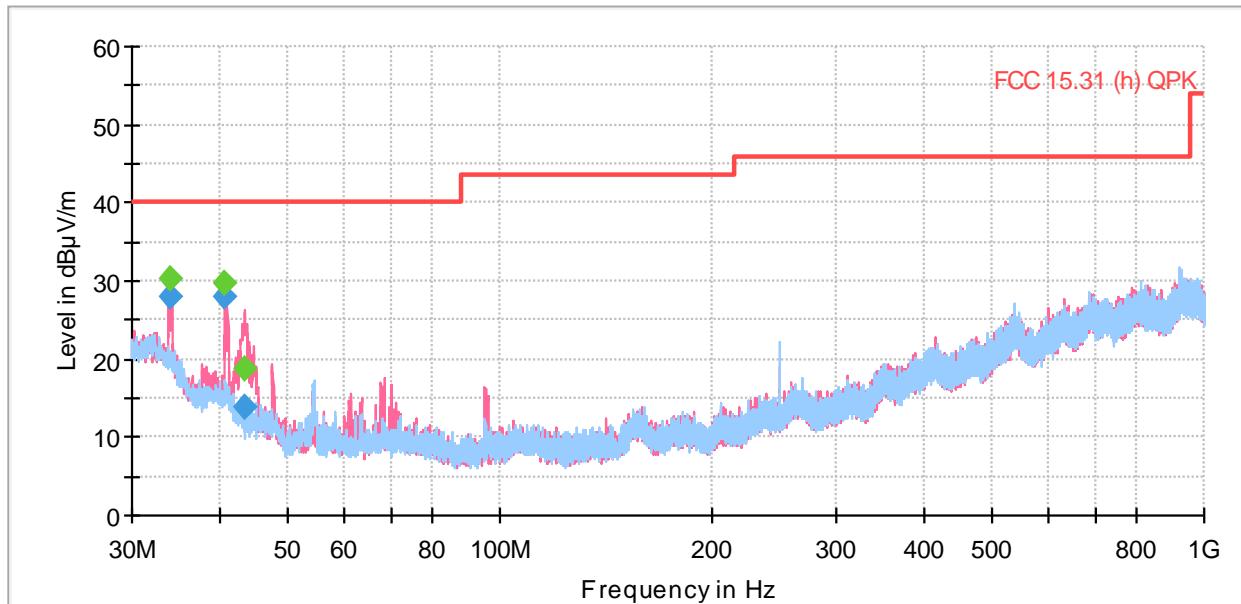
Verdict

Pass

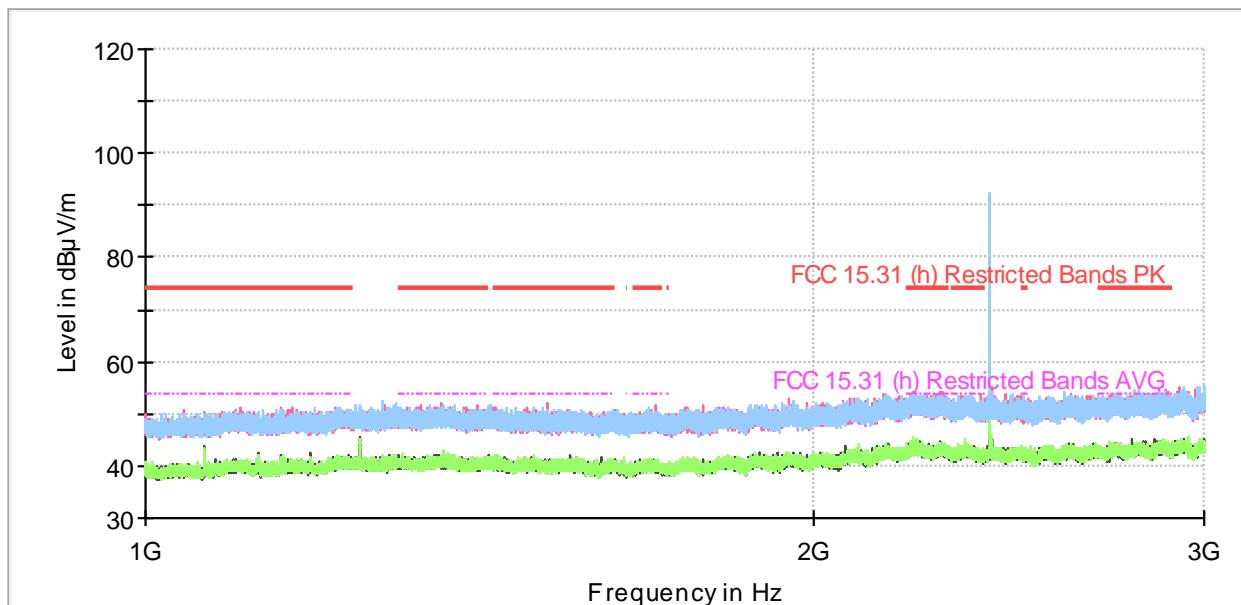
Spectrum analyser parameters:

| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|------------------|-------------|-----------|-----------|------------|--------|
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB |
| 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 3 GHz - 6.5 GHz | 100 kHz | PK+ ; AVG | 1 MHz | 1s | 0 dB |
| 6.5 GHz - 17 GHz | 105 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 17 GHz - 40 GHz | 766.667 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

FREQUENCY RANGE 30 MHz - 1 GHz



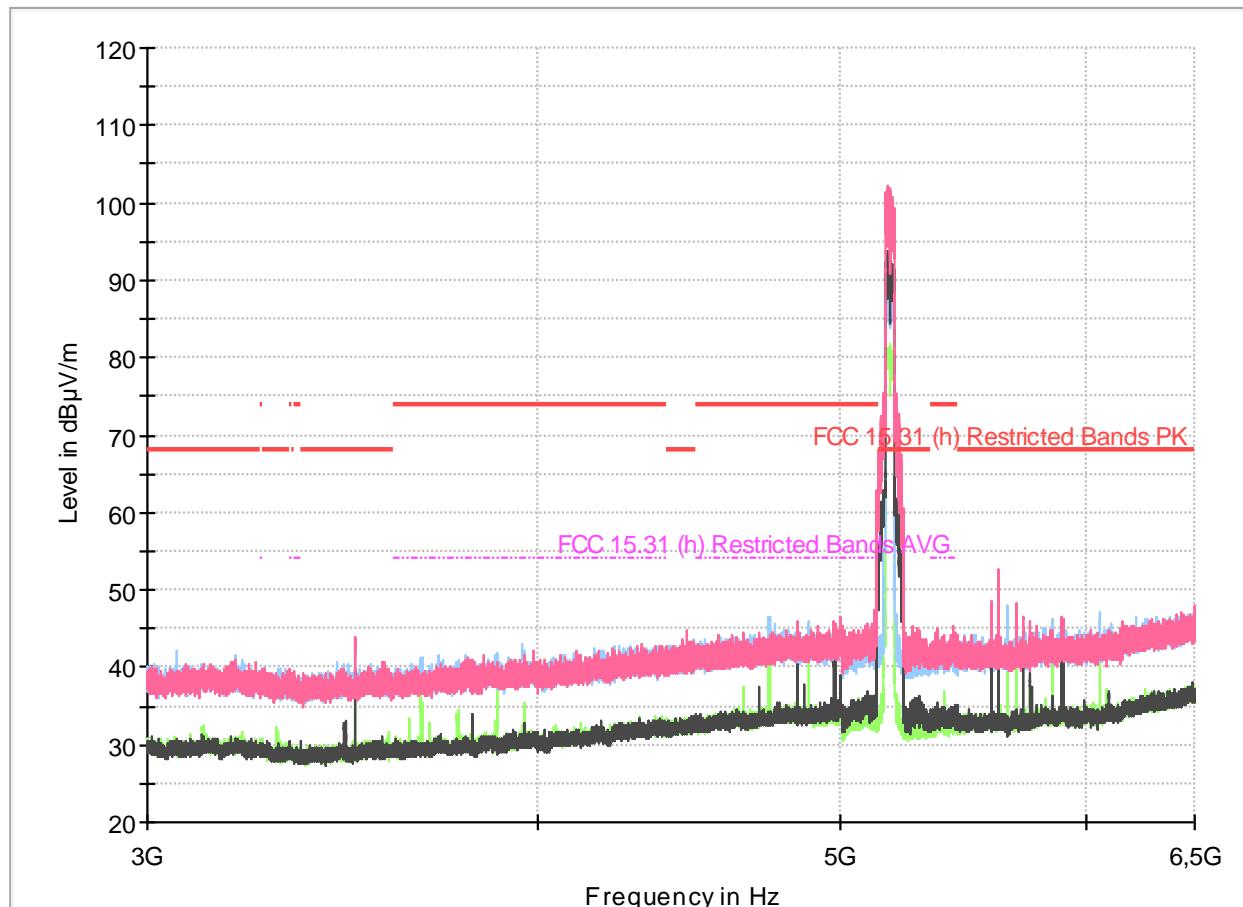
FREQUENCY RANGE 1 - 3 GHz



The peaks above the limit are the BT LE carrier frequency (2402 MHz).

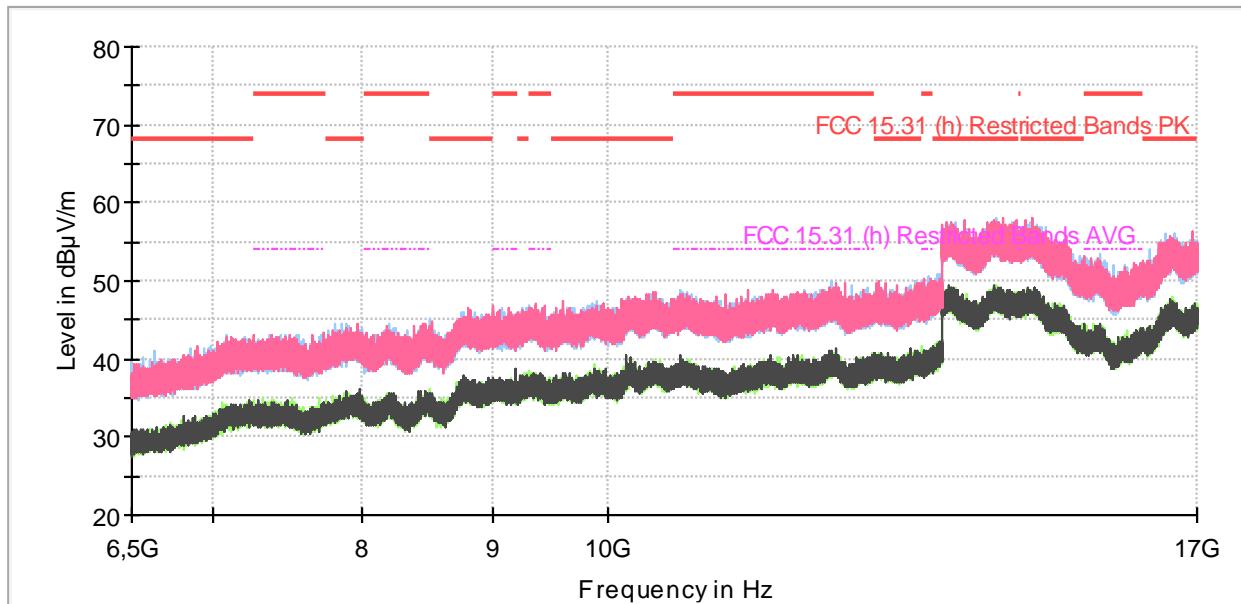
FREQUENCY RANGE 3 – 6.5 GHz

Full Spectrum

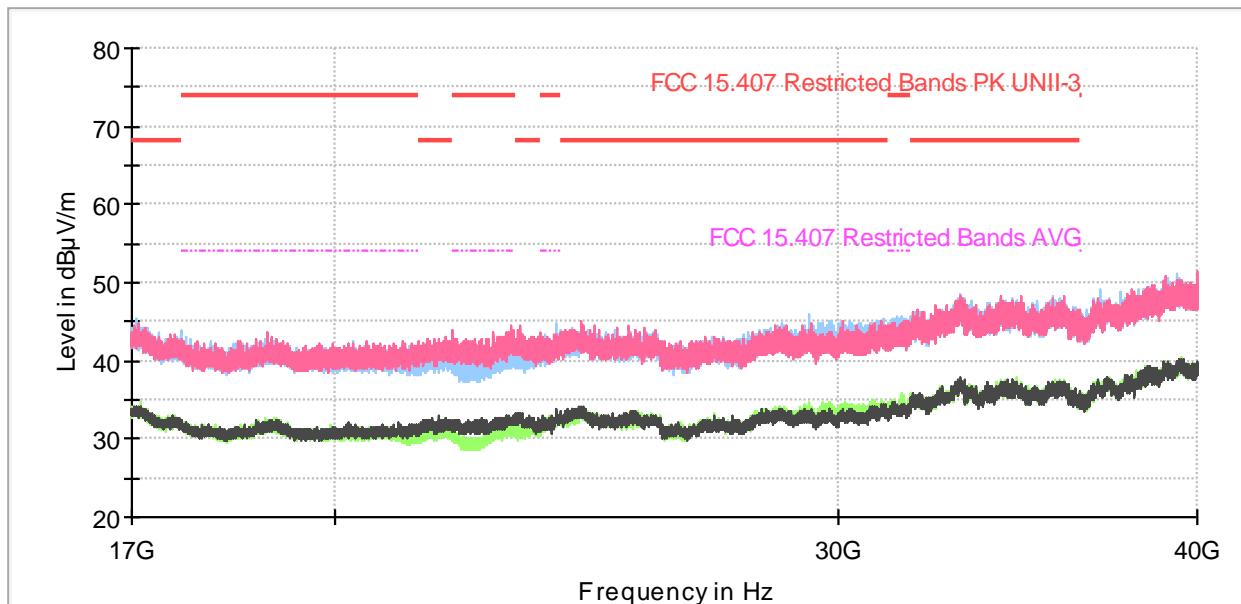


The peak above the limit is the WLAN 5 GHz carrier frequency (5180 MHz).

FREQUENCY RANGE 6.5 GHz – 17 GHz



FREQUENCY RANGE 17 GHz – 40 GHz



- **Operation Mode 2**

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.

Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

Frequency range 30 MHz - 1 GHz

Spurious frequencies detected at less than 20 dB below the limit:

| Frequency (MHz) | QuasiPeak (dB μ V/m) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Pol |
|-----------------|--------------------------|------------------------|----------------------|-----|
| 33.940625 | --- | 29.98 | --- | V |
| 33.940625 | 27.47 | --- | 40.00 | V |
| 40.760938 | --- | 28.45 | --- | V |
| 40.760938 | 26.09 | --- | 40.00 | V |
| 43.549688 | --- | 25.56 | --- | V |
| 43.549688 | 21.47 | --- | 40.00 | V |
| 44.762188 | --- | 23.32 | --- | V |
| 44.762188 | 20.14 | --- | 40.00 | V |
| 47.550938 | --- | 21.31 | --- | V |
| 47.550938 | 18.27 | --- | 40.00 | V |

Frequency range 1 - 40 GHz

No spurious frequencies at less than 20 dB below the limit.

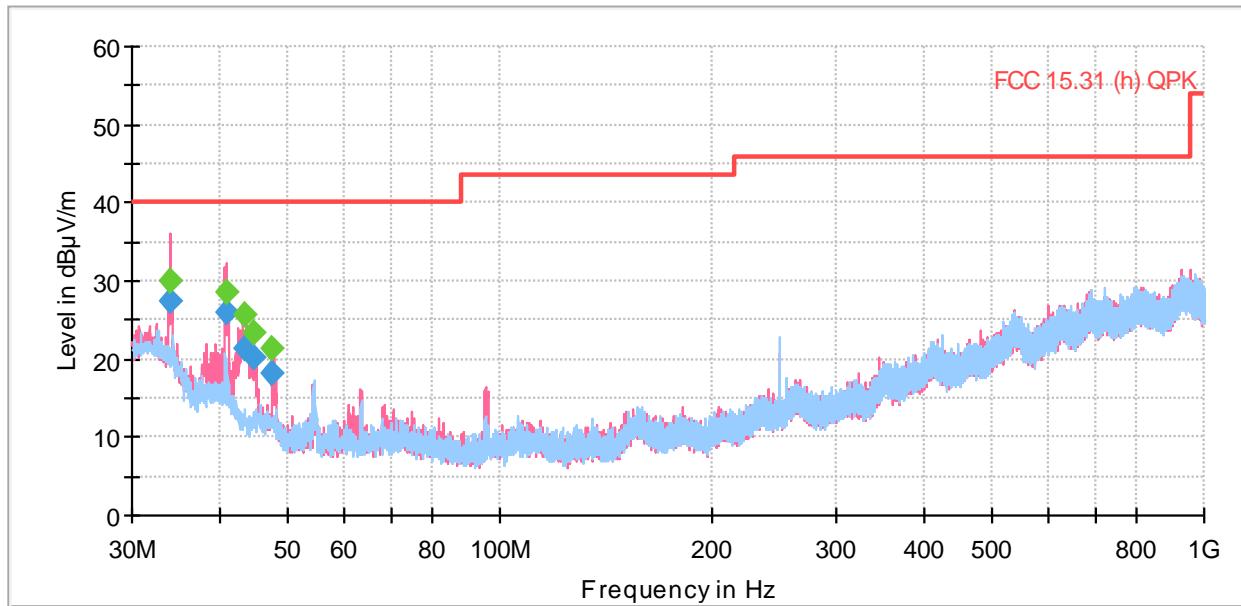
Verdict

Pass

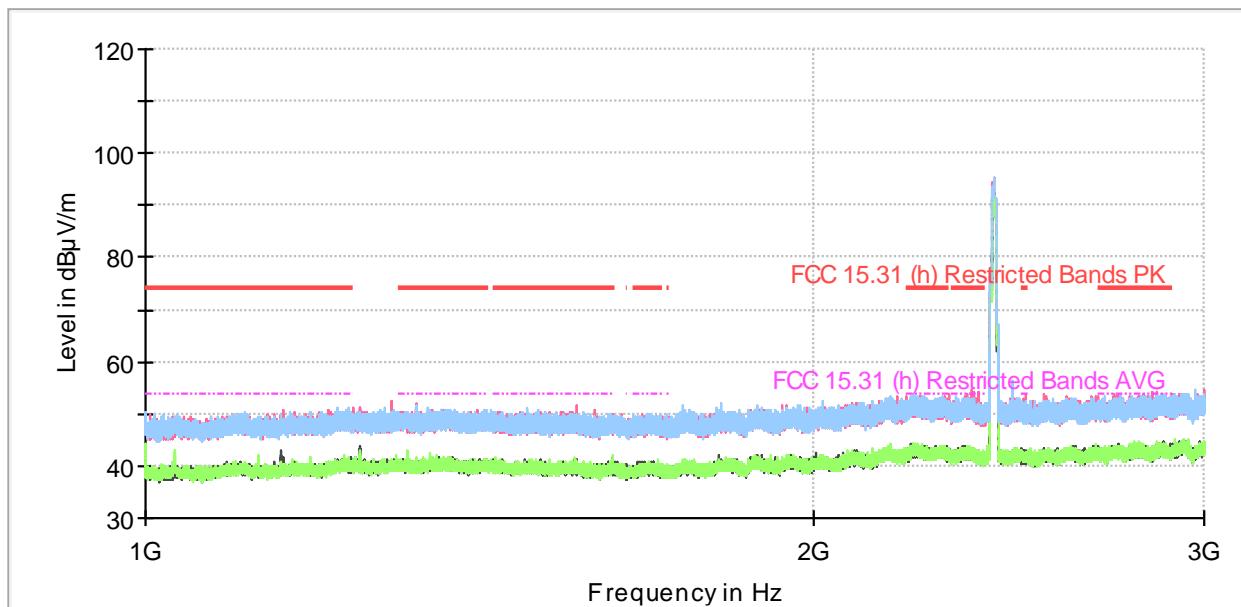
Spectrum analyser parameters:

| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|------------------|-------------|-----------|-----------|------------|--------|
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB |
| 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 3 GHz - 6.5 GHz | 100 kHz | PK+ ; AVG | 1 MHz | 1s | 0 dB |
| 6.5 GHz - 17 GHz | 100 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 17 GHz - 40 GHz | 766.667 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

FREQUENCY RANGE 30 MHz - 1 GHz



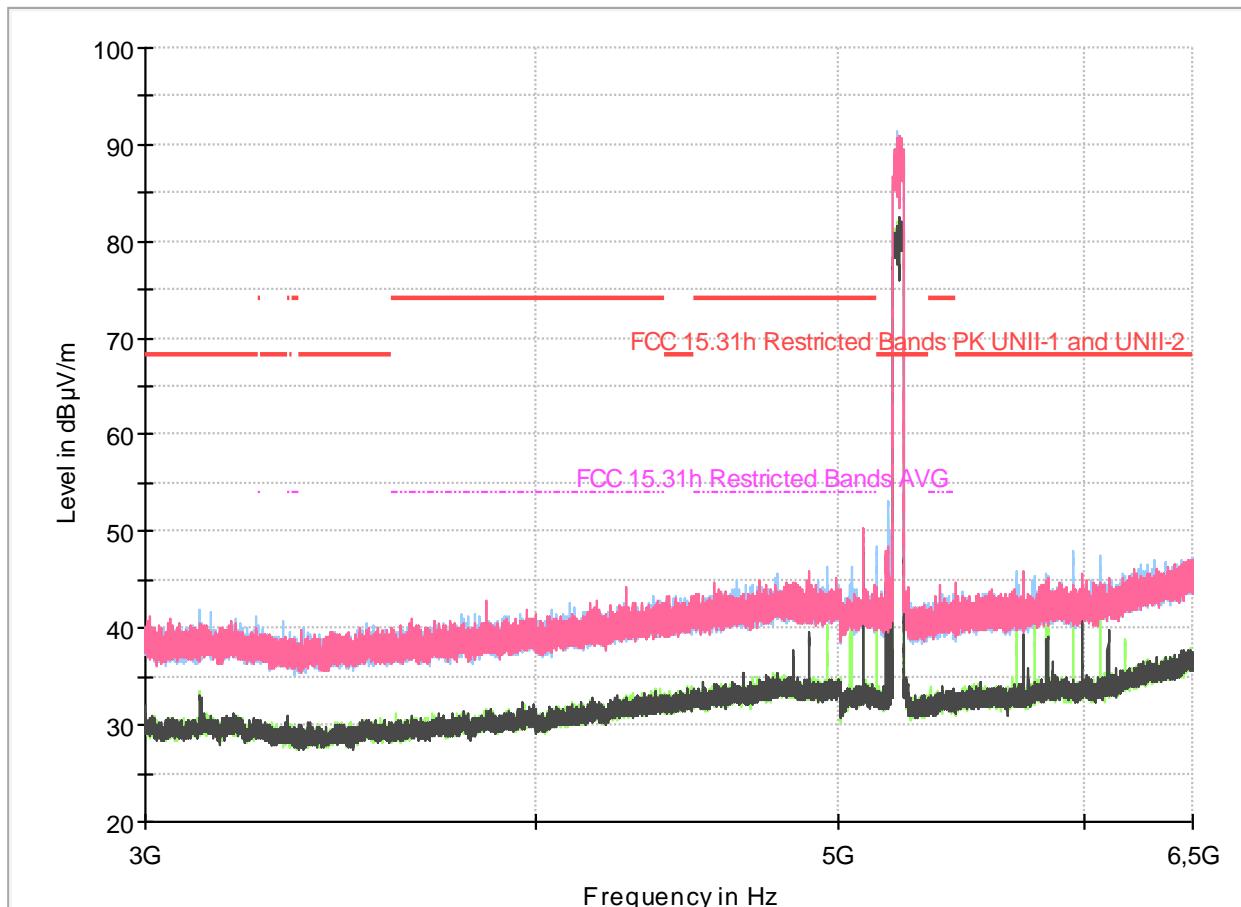
FREQUENCY RANGE 1 - 3 GHz



The peaks above the limit is the 802.11b carrier frequency (2412 MHz).

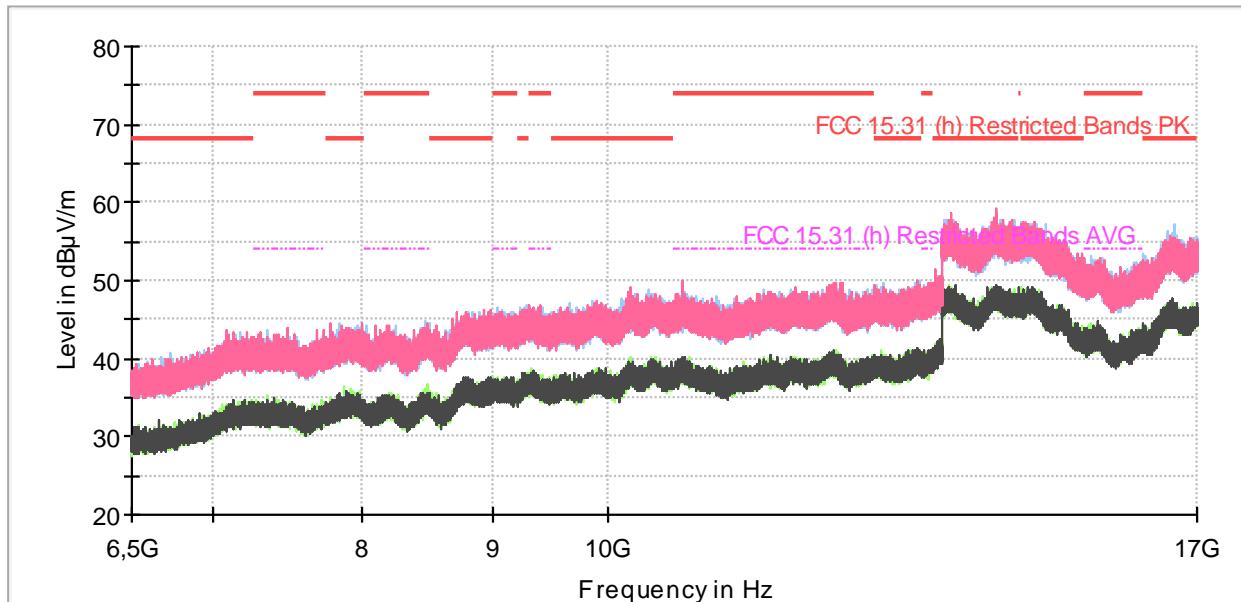
FREQUENCY RANGE 3 – 6.5 GHz

Full Spectrum

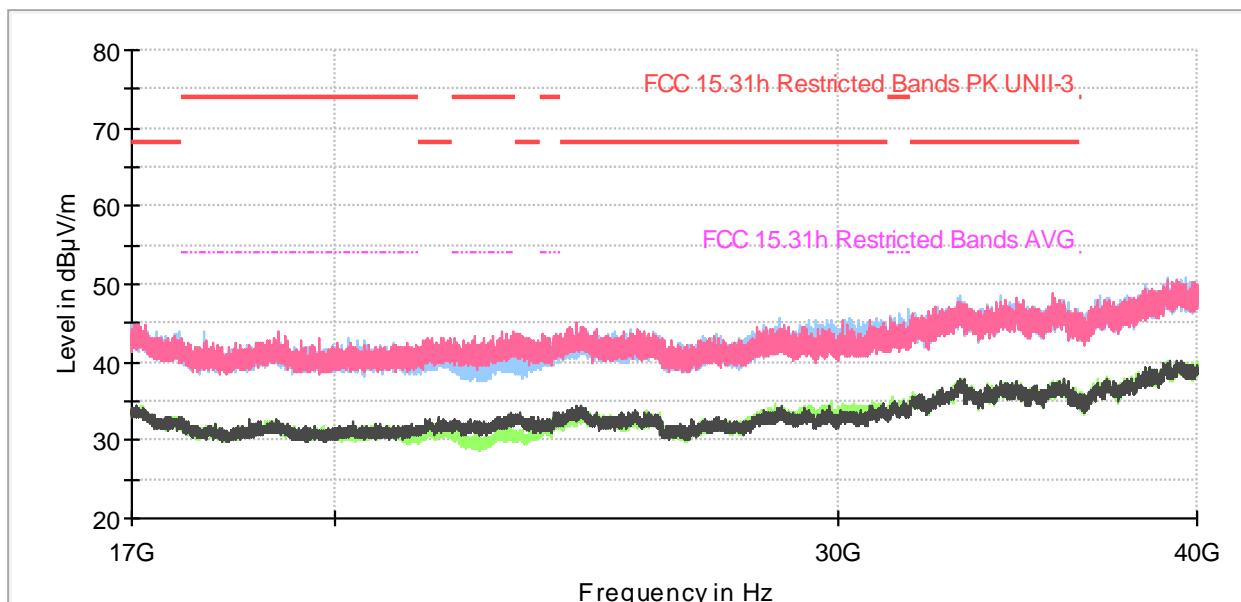


The peak above the limit is the WLAN 5 GHz carrier frequency (5180 MHz).

FREQUENCY RANGE 6.5 GHz – 17 GHz



FREQUENCY RANGE 17 GHz – 40 GHz



- **Operation Mode 3**

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.

Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

Frequency range 30 MHz - 1 GHz

Spurious frequencies detected at less than 20 dB below the limit:

| Frequency (MHz) | QuasiPeak (dB μ V/m) | MaxPeak (dB μ V/m) | Limit (dB μ V/m) | Pol |
|-----------------|--------------------------|------------------------|----------------------|-----|
| 33.910313 | --- | 28.03 | --- | V |
| 33.910313 | 24.83 | --- | 40.00 | V |
| 40.730625 | --- | 28.20 | --- | V |
| 40.730625 | 25.72 | --- | 40.00 | V |
| 43.155625 | 19.83 | --- | 40.00 | V |
| 43.155625 | --- | 23.31 | --- | V |
| 47.550938 | --- | 23.65 | --- | V |
| 47.550938 | 19.74 | --- | 40.00 | V |
| 54.310625 | 22.33 | --- | 40.00 | V |
| 54.310625 | --- | 24.27 | --- | V |

Frequency range 1 - 40 GHz

No spurious frequencies at less than 20 dB below the limit.

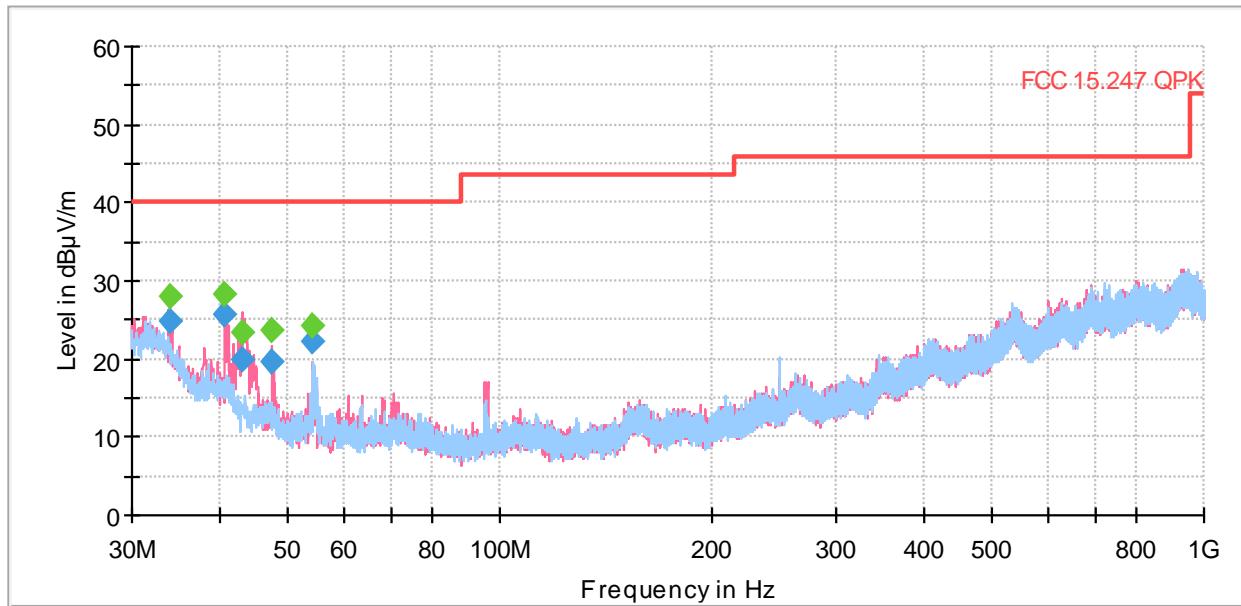
Verdict

Pass

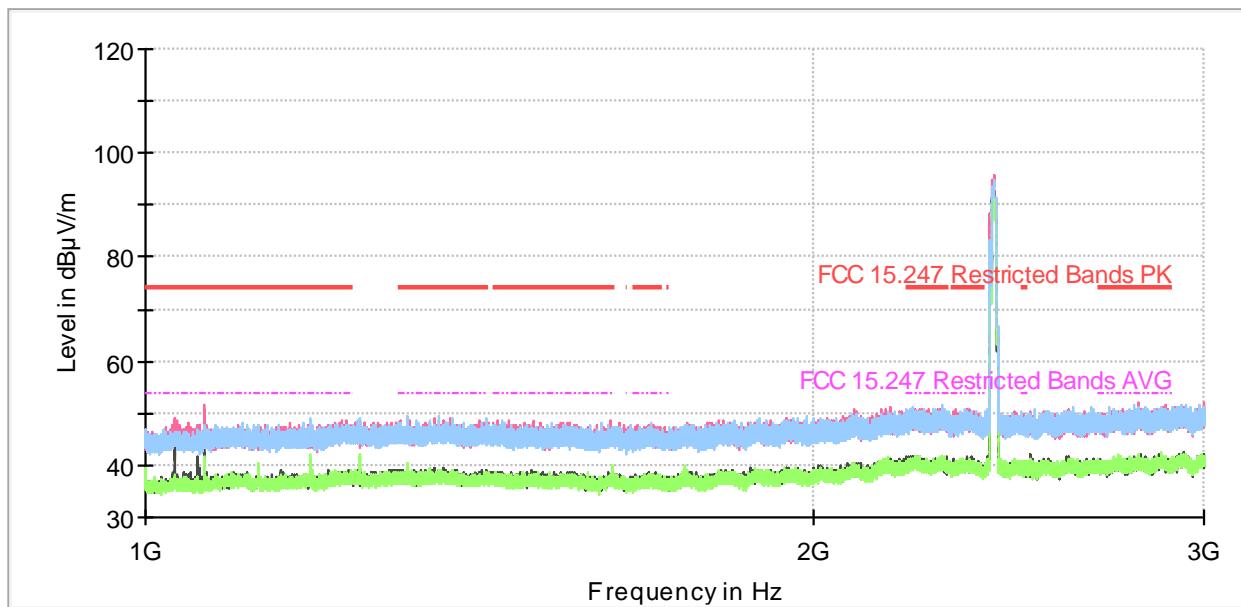
Spectrum analyser parameters:

| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|-----------------|------------|-----------|-----------|------------|--------|
| 30 MHz - 1 GHz | 30,312 kHz | PK+ | 100 kHz | 1 s | 0 dB |
| 1 GHz - 3 GHz | 30,769 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |
| 3 GHz – 17 GHz | 140 kHz | PK+ ; AVG | 1 MHz | 1s | 0 dB |
| 17 GHz - 26 GHz | 300 kHz | PK+ ; AVG | 1 MHz | 1 s | 0 dB |

FREQUENCY RANGE 30 MHz - 1 GHz

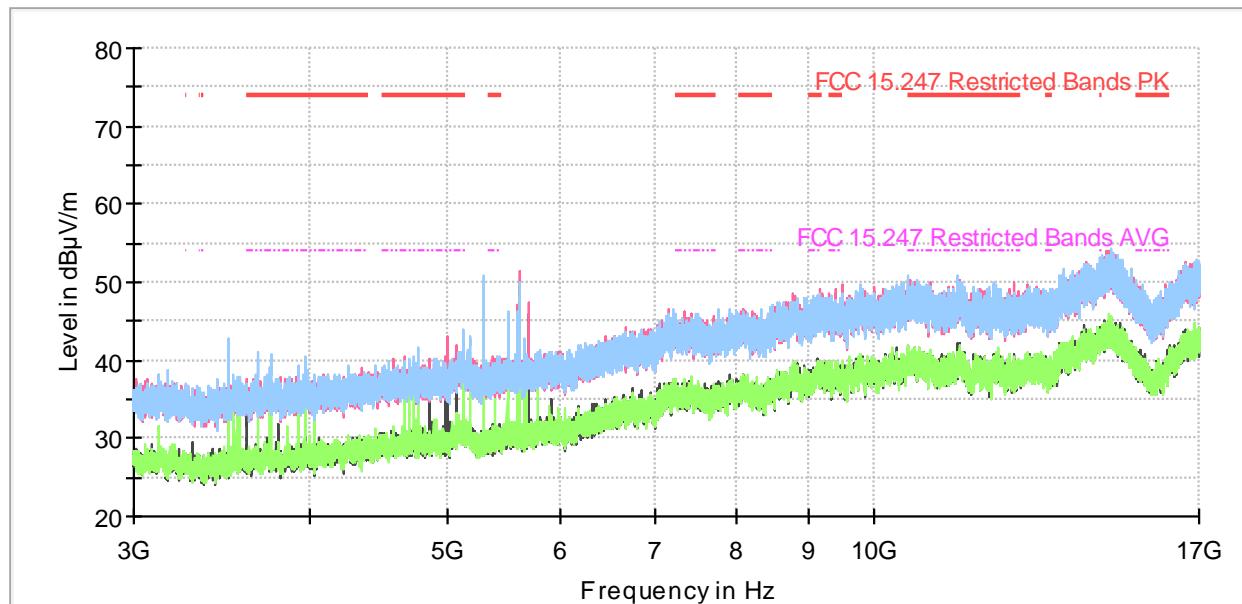


FREQUENCY RANGE 1 - 3 GHz



The peaks above the limit is the 802.11b carrier frequency (2412 MHz) and BT EDR carrier frequency (2402 MHz).

FREQUENCY RANGE 3 – 17 GHz



FREQUENCY RANGE 17 GHz – 26 GHz

