



FCC PART 15C TEST REPORT No.I21Z70186-EMC10

for

Samsung Electronics Co., Ltd.

Notebook PC

XE315XDA

with

FCC ID: ZCAXE315XDA

Hardware Version: REV1.0

Software Version: Chrome

Issued Date: 2021-07-14

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z70186-EMC10	Rev.0	1st edition	2021-07-14

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1. Test Laboratory

1.1.Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0, and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (ISED#: 24849). The detail accreditation scope can be found on NVLAP website.

1.2. Testing Location

Location 1:CTTL(Huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing,
P. R. China100191

Location 2:CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology
Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35℃
Relative Humidity: 20-75%

1.4. Project date

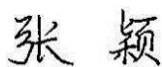
Testing Start Date: 2021-05-06
Testing End Date: 2021-07-02

1.5. Signature



Li Yan

(Prepared this test report)



Zhang Ying

(Reviewed this test report)



Zhang Xia

Deputy Director of the laboratory
(Approved this test report)

2. Client Information

2.1.Applicant Information

Company Name: Samsung Electronics Co., Ltd.
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Fax: /

2.2.Manufacturer Information

Company Name: Samsung Electronics Co., Ltd.
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Contact: Sunghoon Cho
Email: ggobi.cho@samsung.com
Telephone: +82-10-2722-4159
Fax: /

3. PRODUCT INFORMATION

3.1. About EUT

Description	Notebook PC
Model name	XE315XDA
FCC ID	ZCAXE315XDA

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of T CTTL-Telecommunication Technology Labs, CAICT

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	2170186UT44a	REV1.0	Chrome
EUT2	2170186UT25a	REV1.0	Chrome

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description	SN	Remarks
AE1	Travel Adapter	/	/
AE2	Travel Adapter	/	/
AE3	battery	/	Inbuilt

AE1

Model	EP-TA845
Manufacturer	DONGYANG E&P Inc
Length of cable	/

AE2

Model	EP-TA845
Manufacturer	SOLUM CO.,LTD
Length of cable	/

AE3

Model	/
Manufacturer	/

*AE ID: is used to identify the test sample in the lab internally.

3.4. General Description

The Equipment Under Test (EUT) was a Notebook PC with Bluetooth, Bluetooth Low Energy and 802.11 a/b/g/n/ac/ax capabilities in the 2.4 GHz and 5 GHz bands.

Antenna information

Item	Spec.	Vendor	Vendor P/N	Sample under test
Antenna	Main antenna (Chain A)	AWAN	/	EUT2
	Auxiliary antenna (Chain B)			
Antenna	Main antenna (Chain A)	SPEED	/	EUT1
	Auxiliary antenna (Chain B)			

Manual and specifications of the EUT were provided to fulfil the test.

Samples undergoing test were selected by the Client.

For more EUT information please refers to the manufacturer's specifications or user's manual.

3.5. Test Configuration

For 802.11b/g modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, but not simultaneously.

For 802.11n20 & 802.11ax20 (20 MHz channel bandwidth), 802.11n40 & 802.11ax40 (40MHz channel bandwidth) modes the EUT can transmit at both CHAIN A and CHAIN B RF outputs individually, and also simultaneously(MIMO).

The software DRTU provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

3.6. Interpretation of the Test Environment

For the test methods, the test environment uncertainty figures correspond to an expansion factor k=2.

Measurement Uncertainty

Parameter	Uncertainty
temperature	0.48°C
humidity	2 %
DC voltages	0.003V

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part15	FCC CFR 47, Part 15, Subpart C:	2019
	15.205 Restricted bands of operation;	
	15.209 Radiated emission limits, general requirements;	
ANSI C63.10	15.247 Operation within the bands 902-928MHz, 2400-2483.5 MHz, and 5725-5850 MHz.	2013
	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	
	Federal Communications Commission Office of Engineering and Technology Laboratory Division	
KDB 558074 D01	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES	2019

Note: The test methods have no deviation with standards.

5. SUMMARY OF TEST RESULTS

5.1. Summary of Test Results

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Verdict
Radiated Spurious Emission	15.247, 15.205, 15.209	P
AC Power line Conducted Emission	15.107, 15.207	P

Please refer to **ANNEX C** for detail.

Terms used in Verdict column

P	Pass, The EUT complies with the essential requirements in the standard.
NP	Not Perform, The test was not performed by CTTL
BR	Re-use test data from basic model report.
NA	Not Applicable, The test was not applicable
F	Fail, The EUT does not comply with the essential requirements in the standard

5.2. Statements

The test cases as listed in section 5.1 of this report for the EUT specified in section 3 was performed by CTTL and according to the standards or reference documents listed in section 4.2 The EUT met all requirements of the standards or reference documents, and only the WLAN function was tested in this report.

5.3. Test Conditions

T nom	Normal Temperature
T min	Low Temperature
T max	High Temperature
V nom	Normal Voltage

For this report, if the test cases listed above are tested under normal temperature and normal voltage, and also under norm humidity, the specific condition is shown as follows:

Temperature	T nom	26℃
Voltage	V nom	4.0V
Humidity	H nom	20-75%

6. Test Facilities Utilized

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESU26	100376	R&S	1 year	2021-09-04
2	BiLog Antenna	VULB9163	9163-482	Schwarzbeck	1 year	2021-11-04
3	Dual-Ridge Waveguide Horn Antenna	3117	00139065	ETS-Lindgren	1 year	2021-10-11
4	Dual-Ridge Waveguide Horn Antenna	3116	2663	ETS-Lindgren	1 year	2021-08-05
5	Vector Signal Analyzer	FSV40	101047	R&S	1 year	2022-05-17
6	Loop Antenna	HFH2-Z2	829324/007	R&S	1 year	2021-12-10
7	Test Receiver	ESU26	100235	R&S	1 year	2022-02-23

AC Powerline Conducted Emission

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	LISN	ENV216	101459	R&S	1 year	2022-03-16
2	Test Receiver	ESCI	100766	R&S	1 year	2022-03-09

7. Measurement Uncertainty

Radiated Spurious Emission

(k=2)

Frequency Range	Uncertainty(dB)
9kHz-30MHz	/
$30\text{MHz} \leq f \leq 1\text{GHz}$	5.40
$1\text{GHz} \leq f \leq 18\text{GHz}$	4.32
$18\text{GHz} \leq f \leq 40\text{GHz}$	5.26

AC Power-line Conducted Emission

Measurement Uncertainty : 3.10dB,k=2

ANNEX A: EUT parameters

Disclaimer: The antenna gain and setting power provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX B: Antenna Requirements

According to FCC 47 CFR § 15.203:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- (1) The antennas of the EUT are permanently attached.
- (2) The EUT complies with the requirement of §15.203

ANNEX C: Detailed Test Results

C.1. Radiated Spurious Emission

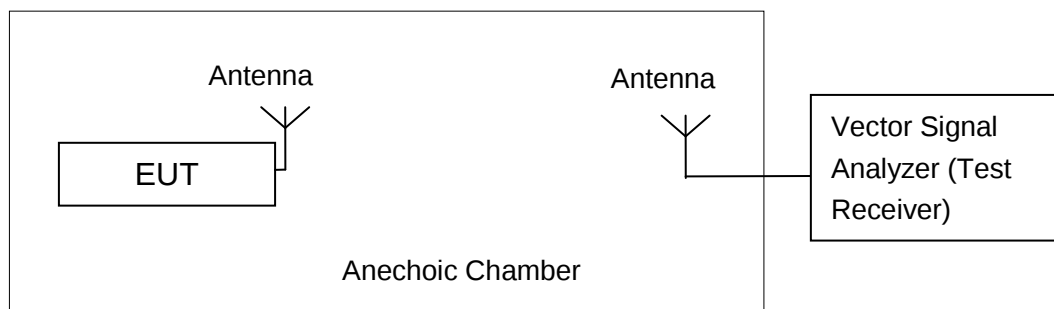
Specification Reference

FCC 47 CFR Part 15.247, 15.205, 15.209

Method of Measurement

Testing was performed in according with ANSI C63.10-2013 and KDB 558074.

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.



Measurement Limit

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

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)).

Limit in restricted band:

Frequency (MHz)	Field strength(μ 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

Frequency of emission (MHz)	Field strength(dBμV/m)	Measurement distance(m)
30-88	40.0	3
88-216	43.5	3
216-960	46.0	3
Above 960	54.0	3

Test settings

Frequency of emission (MHz)	RBW/VBW
30-1000	100kHz/300kHz
1000-4000	1MHz/3MHz
4000-18000	1MHz/3MHz
18000-26500	1MHz/3MHz

Sample Calculation

The measurement results are obtained as described below:

$$\text{Result} = P_{\text{Mea}} + A_{\text{Rpl}} = P_{\text{Mea}} + \text{Cable Loss} + \text{Antenna Factor}$$

A "reference path loss" is established and the A_{Rpl} is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

P_{Mea} is the field strength recorded from the instrument.

Test Notes

1. The EUT is operating at its maximum duty cycle and its maximum power control level.
2. Investigation has been done on all channel, modes and modulations/data rates. Only the radiated emissions of the configurations that produced the worst case emissions are reported in this section.
- 3.

For EUT1 with SPEED antenna the measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this report.

For EUT2 with AWAN antenna the measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this report.

C.1.1 Radiated Spurious Emission- above 1GHz

SPEED

The measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this section.

Peak results

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2369.472	59.83	2.85	31.98	25.00	74.00	14.17	V
2371.908	60.34	2.85	31.98	25.50	74.00	13.66	V
4823.500	48.05	-33.24	34.13	47.15	74.00	25.95	V
4998.000	48.32	-33.65	34.20	47.78	74.00	25.68	V
7236.000	42.63	-30.88	35.80	37.72	74.00	31.37	V
9648.000	43.34	-30.46	36.71	37.09	74.00	30.66	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2370.400	43.48	-34.47	31.98	45.97	74.00	30.52	H
2505.400	43.57	-34.21	32.11	45.67	74.00	30.43	H
4874.000	45.55	-33.30	34.15	44.70	74.00	28.45	H
4995.000	47.55	-33.65	34.20	47.00	74.00	26.45	V
7310.800	43.12	-30.81	35.83	38.11	74.00	30.88	V
9747.000	43.84	-30.33	36.85	37.32	74.00	30.16	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2485.445	60.37	2.93	32.09	25.35	74.00	13.63	V
2486.625	60.39	2.93	32.09	25.37	74.00	13.61	V
4923.500	43.33	-33.53	34.17	42.69	74.00	30.67	V
4992.000	46.87	-33.64	34.20	46.31	74.00	27.13	H
7386.000	43.23	-31.45	35.86	38.83	74.00	30.77	V
9848.000	44.29	-30.18	36.99	37.48	74.00	29.71	H

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2371.180	59.77	2.85	31.98	24.93	74.00	14.23	H
2377.396	59.75	2.86	31.99	24.90	74.00	14.25	H
4823.500	43.85	-33.24	34.13	42.96	74.00	30.15	V
4999.000	47.45	-33.66	34.20	46.90	74.00	26.55	H
7236.000	42.43	-30.88	35.80	37.51	74.00	31.57	V
9648.500	44.62	-30.46	36.71	38.36	74.00	29.38	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2368.400	43.91	-34.55	31.98	46.48	74.00	30.09	H
2506.400	43.49	-34.22	32.11	45.59	74.00	30.51	H
4874.000	43.49	-33.30	34.15	42.64	74.00	30.51	H
4990.000	47.40	-33.63	34.20	46.84	74.00	26.60	V
7311.000	43.61	-30.82	35.83	38.60	74.00	30.39	V
9749.500	44.89	-30.33	36.85	38.37	74.00	29.11	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2486.570	59.87	2.93	32.09	24.85	74.00	14.13	V
2487.075	59.95	2.93	32.09	24.92	74.00	14.05	H
4923.500	41.25	-33.53	34.17	40.61	74.00	32.75	V
4998.500	47.65	-33.66	34.20	47.11	74.00	26.35	V
7386.000	42.53	-31.45	35.86	38.13	74.00	31.47	V
9848.000	44.67	-30.18	36.99	37.86	74.00	29.33	V

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2367.512	60.08	2.85	31.98	25.25	74.00	13.92	H
2386.188	60.46	2.86	32.00	25.60	74.00	13.54	V
4824.500	44.24	-33.24	34.13	43.35	74.00	29.76	H
4997.500	47.03	-33.65	34.20	46.49	74.00	26.97	H
7236.000	43.21	-30.88	35.80	38.30	74.00	30.79	H
9648.000	44.48	-30.46	36.71	38.23	74.00	29.52	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2369.600	43.90	-34.50	31.98	46.42	74.00	30.10	V
2509.400	43.78	-34.25	32.12	45.91	74.00	30.22	V
4873.500	43.03	-33.30	34.15	42.18	74.00	30.97	H
4992.000	47.35	-33.64	34.20	46.79	74.00	26.65	V
7311.000	43.30	-30.82	35.83	38.29	74.00	30.70	V
9748.500	43.89	-30.33	36.85	37.37	74.00	30.11	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2488.405	60.56	2.94	32.09	25.54	74.00	13.44	V
2492.660	60.51	2.94	32.09	25.47	74.00	13.49	H
4923.500	42.53	-33.53	34.17	41.89	74.00	31.47	H
4991.000	47.02	-33.64	34.20	46.46	74.00	26.98	V
7386.000	42.55	-31.45	35.86	38.15	74.00	31.45	H
9848.000	44.01	-30.18	36.99	37.20	74.00	29.99	V

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2383.822	60.62	2.86	31.99	25.77	74.00	13.38	H
2389.366	60.23	2.87	32.00	25.37	74.00	13.77	V
4844.000	42.11	-33.23	34.14	41.20	74.00	31.89	H
4994.000	48.12	-33.64	34.20	47.56	74.00	25.88	H
7266.500	42.97	-30.59	35.81	37.76	74.00	31.03	V
9688.000	43.46	-30.37	36.77	37.06	74.00	30.54	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2367.000	43.83	-34.61	31.98	46.45	74.00	30.17	H
2510.000	43.31	-34.26	32.12	45.45	74.00	30.69	V
4874.000	42.89	-33.30	34.15	42.04	74.00	31.11	H
4981.000	47.14	-33.61	34.19	46.55	74.00	26.86	V
7311.000	47.31	-30.82	35.83	42.30	74.00	26.69	H
9748.500	43.89	-30.33	36.85	37.37	74.00	30.11	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.855	63.16	2.93	32.09	28.14	74.00	10.84	V
2486.160	61.29	2.93	32.09	26.27	74.00	12.71	V
4904.000	41.59	-33.42	34.16	40.85	74.00	32.41	H
4993.000	46.95	-33.64	34.20	46.40	74.00	27.05	V
7356.000	42.16	-31.17	35.84	37.49	74.00	31.84	V
9808.000	43.60	-30.32	36.94	36.99	74.00	30.40	H

802.11ax-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2351.286	59.67	2.8	32.0	24.87	74.0	14.3	V
2388.876	59.99	2.9	32.0	25.13	74.0	14.0	V
4824.500	44.18	-33.2	34.1	43.28	74.0	29.8	H
4992.500	46.89	-33.6	34.2	46.33	74.0	27.1	V
7236.000	43.52	-30.9	35.8	38.61	74.0	30.5	V
9648.000	44.63	-30.5	36.7	38.38	74.0	29.4	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2368.800	43.97	-34.5	32.0	46.53	74.0	30.0	V
2509.400	43.86	-34.2	32.1	46.00	74.0	30.1	V
4874.000	43.03	-33.3	34.2	42.18	74.0	31.0	H
4990.500	47.00	-33.6	34.2	46.44	74.0	27.0	H
7311.000	47.31	-30.8	35.8	42.30	74.0	26.7	H
9748.500	43.89	-30.3	36.9	37.37	74.0	30.1	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.130	60.46	2.9	32.1	25.44	74.0	13.5	V
2488.265	60.42	2.9	32.1	25.40	74.0	13.6	H
4923.500	42.46	-33.5	34.2	41.82	74.0	31.5	V
4994.500	47.45	-33.6	34.2	46.90	74.0	26.5	H
7386.000	42.39	-31.5	35.9	37.99	74.0	31.6	V
9848.000	44.11	-30.2	37.0	37.30	74.0	29.9	H

802.11ax-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2373.798	61.03	2.9	32.0	26.19	74.0	13.0	H
2383.094	60.62	2.9	32.0	25.76	74.0	13.4	H
4844.000	42.11	-33.2	34.1	41.20	74.0	31.9	V
4999.000	47.14	-33.7	34.2	46.60	74.0	26.9	V
7266.500	42.97	-30.6	35.8	37.76	74.0	31.0	H
9688.000	43.46	-30.4	36.8	37.06	74.0	30.5	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2369.600	43.65	-34.5	32.0	46.17	74.0	30.3	H
2502.800	43.75	-34.2	32.1	45.83	74.0	30.3	V
4874.000	42.78	-33.3	34.2	41.93	74.0	31.2	V
4986.500	47.21	-33.6	34.2	46.64	74.0	26.8	H
7311.000	47.42	-30.8	35.8	42.41	74.0	26.6	V
9748.500	43.85	-30.3	36.9	37.33	74.0	30.2	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.085	65.79	2.9	32.1	30.77	74.0	8.2	V
2494.560	65.93	2.9	32.1	30.90	74.0	8.1	V
4904.000	42.53	-33.4	34.2	41.79	74.0	31.5	H
4999.500	47.38	-33.7	34.2	46.84	74.0	26.6	V
7356.000	43.81	-31.2	35.8	39.14	74.0	30.2	V
9808.500	43.93	-30.3	36.9	37.32	74.0	30.1	V

Average

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.560	46.66	2.87	32.00	11.80	54.00	7.34	V
2390.000	46.67	2.87	32.00	11.80	54.00	7.33	V
4824.000	44.15	-33.24	34.13	43.25	54.00	9.85	V
4993.000	31.76	-33.64	34.20	31.20	54.00	22.24	H
7236.000	30.63	-30.88	35.80	25.72	54.00	23.37	V
9648.000	31.32	-30.46	36.71	25.07	54.00	22.68	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2425.140	46.60	2.89	32.03	11.68	54.00	7.40	V
2449.380	46.56	2.91	32.05	11.60	54.00	7.44	V
4874.000	31.98	-33.30	34.15	31.13	54.00	22.02	V
4998.000	31.50	-33.65	34.20	30.95	54.00	22.50	H
7311.000	30.35	-30.82	35.83	25.34	54.00	23.65	V
9746.000	31.33	-30.33	36.85	24.82	54.00	22.67	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	46.63	2.93	32.09	11.62	54.00	7.37	V
2484.000	46.67	2.93	32.09	11.65	54.00	7.33	V
4924.000	31.01	-33.53	34.17	30.37	54.00	22.99	H
4995.200	31.49	-33.65	34.20	30.93	54.00	22.51	V
7389.000	30.00	-31.48	35.86	25.62	54.00	24.00	V
9848.000	31.10	-30.18	36.99	24.29	54.00	22.90	H

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2387.220	46.37	2.86	32.00	11.51	54.00	7.63	V
2389.620	46.45	2.87	32.00	11.59	54.00	7.55	V
4823.500	31.67	-33.24	34.13	30.78	54.00	22.33	H
4991.020	29.81	-33.64	34.20	29.25	54.00	24.19	H
7236.200	30.67	-30.88	35.80	25.75	54.00	23.33	H
9648.000	31.47	-30.46	36.71	25.22	54.00	22.53	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2413.500	46.60	2.88	32.02	11.70	54.00	7.40	V
2461.020	46.68	2.92	32.06	11.70	54.00	7.32	V
4873.500	31.49	-33.30	34.15	30.64	54.00	22.51	H
4990.000	31.68	-33.63	34.20	31.11	54.00	22.32	H
7311.000	30.72	-30.82	35.83	25.71	54.00	23.28	H
9749.500	31.66	-30.33	36.85	25.14	54.00	22.34	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.520	46.61	2.93	32.09	11.59	54.00	7.39	V
2484.420	46.55	2.93	32.09	11.54	54.00	7.45	V
4923.500	31.10	-33.53	34.17	30.46	54.00	22.90	V
4992.000	31.38	-33.64	34.20	30.82	54.00	22.62	H
7386.000	30.10	-31.45	35.86	25.70	54.00	23.90	H
9848.000	31.11	-30.18	36.99	24.30	54.00	22.89	V

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.500	47.01	2.87	32.00	12.15	54.00	6.99	V
2389.920	47.02	2.87	32.00	12.16	54.00	6.98	V
4824.500	32.62	-33.24	34.13	31.72	54.00	21.38	H
4997.500	31.82	-33.65	34.20	31.28	54.00	22.18	H
7236.000	30.68	-30.88	35.80	25.77	54.00	23.32	V
9648.000	31.26	-30.46	36.71	25.01	54.00	22.74	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2419.980	48.01	2.89	32.03	13.10	54.00	5.99	V
2455.020	48.34	2.91	32.06	13.37	54.00	5.66	V
4873.500	29.68	-33.30	34.15	28.83	54.00	24.32	V
4992.000	31.02	-33.64	34.20	30.46	54.00	22.98	H
7311.000	30.47	-30.82	35.83	25.46	54.00	23.53	H
9748.500	31.39	-30.33	36.85	24.87	54.00	22.61	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.520	47.10	2.93	32.09	12.09	54.00	6.90	V
2483.580	47.06	2.93	32.09	12.05	54.00	6.94	V
4923.500	29.84	-33.53	34.17	29.20	54.00	24.16	V
4991.000	31.05	-33.64	34.20	30.49	54.00	22.95	V
7386.000	31.12	-31.45	35.86	26.72	54.00	22.88	V
9848.000	31.45	-30.18	36.99	24.64	54.00	22.55	V

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.960	46.82	2.87	32.00	11.95	54.00	7.18	V
2389.620	46.92	2.87	32.00	12.06	54.00	7.08	V
4844.000	29.56	-33.23	34.14	28.66	54.00	24.44	H
4994.000	31.38	-33.64	34.20	30.83	54.00	22.62	V
7266.500	30.96	-30.59	35.81	25.74	54.00	23.04	H
9688.000	31.41	-30.37	36.77	25.00	54.00	22.59	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2401.200	46.87	2.87	32.01	11.99	54.00	7.13	V
2470.800	47.30	2.92	32.07	12.30	54.00	6.70	V
4874.000	29.65	-33.30	34.15	28.80	54.00	24.35	V
4987.500	31.33	-33.63	34.20	30.76	54.00	22.67	V
7311.000	30.57	-30.82	35.83	25.56	54.00	23.43	V
9748.500	31.62	-30.33	36.85	25.10	54.00	22.38	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.580	49.92	2.93	32.09	14.90	54.00	4.08	V
2484.540	49.79	2.93	32.09	14.78	54.00	4.21	V
4904.000	29.83	-33.42	34.16	29.09	54.00	24.17	V
4993.000	31.18	-33.64	34.20	30.62	54.00	22.82	H
7356.000	30.25	-31.17	35.84	25.58	54.00	23.75	V
9808.000	31.20	-30.32	36.94	24.59	54.00	22.80	V

802.11ax-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.800	47.00	2.9	32.0	12.13	54.0	7.0	V
2389.920	47.01	2.9	32.0	12.14	54.0	7.0	V
4824.500	30.94	-33.2	34.1	30.04	54.0	23.1	H
4992.500	31.00	-33.6	34.2	30.44	54.0	23.0	H
7236.000	30.53	-30.9	35.8	25.61	54.0	23.5	H
9648.000	31.36	-30.5	36.7	25.11	54.0	22.6	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2417.280	47.57	2.9	32.0	12.66	54.0	6.4	V
2455.140	48.17	2.9	32.1	13.20	54.0	5.8	V
4874.000	29.68	-33.3	34.2	28.83	54.0	24.3	V
4982.500	31.83	-33.6	34.2	31.25	54.0	22.2	V
7311.000	30.51	-30.8	35.8	25.50	54.0	23.5	H
9748.500	31.44	-30.3	36.9	24.92	54.0	22.6	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.520	47.07	2.9	32.1	12.05	54.0	6.9	V
2483.580	47.09	2.9	32.1	12.07	54.0	6.9	V
4923.500	29.69	-33.5	34.2	29.04	54.0	24.3	H
4992.000	31.25	-33.6	34.2	30.69	54.0	22.8	H
7386.000	30.97	-31.5	35.9	26.57	54.0	23.0	V
9848.000	31.21	-30.2	37.0	24.40	54.0	22.8	H

802.11ax-HT40
Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.960	46.82	2.9	32.0	11.95	54.0	7.2	V
2389.620	46.92	2.9	32.0	12.06	54.0	7.1	V
4844.000	29.56	-33.2	34.1	28.66	54.0	24.4	H
4994.000	31.38	-33.6	34.2	30.83	54.0	22.6	V
7266.500	30.96	-30.6	35.8	25.74	54.0	23.0	H
9688.000	31.41	-30.4	36.8	25.00	54.0	22.6	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2401.200	46.87	2.9	32.0	11.99	54.0	7.1	V
2470.800	47.30	2.9	32.1	12.30	54.0	6.7	V
4874.000	29.65	-33.3	34.2	28.80	54.0	24.4	V
4987.500	31.33	-33.6	34.2	30.76	54.0	22.7	V
7311.000	30.57	-30.8	35.8	25.56	54.0	23.4	V
9748.500	31.63	-30.3	36.9	25.10	54.0	22.4	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.580	49.92	2.9	32.1	14.90	54.0	4.1	V
2484.540	49.79	2.9	32.1	14.78	54.0	4.2	V
4904.000	29.83	-33.4	34.2	29.09	54.0	24.2	V
4993.000	31.18	-33.6	34.2	30.62	54.0	22.8	H
7356.000	30.25	-31.2	35.8	25.58	54.0	23.7	V
9808.000	31.21	-30.3	36.9	24.59	54.0	22.8	V

Note: the spurious emission above 18G is noise only.

Conclusion: Pass

AWAN

The measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this section.

Peak results

802.11b

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2381.575	54.39	2.62	27.66	24.11	74.00	19.61	V
2386.020	54.27	2.62	27.66	23.99	74.00	19.73	V
4823.606	45.44	-37.83	32.06	51.21	74.00	26.59	H
4995.938	47.41	-37.77	32.49	52.69	74.00	29.28	V
7236.094	42.02	-36.90	35.78	43.15	74.00	31.98	H
9647.812	44.72	-35.74	37.80	42.65	74.00	29.28	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2511.250	45.53	-39.47	27.73	57.26	74.00	19.61	V
2560.375	42.00	-40.03	27.87	54.16	74.00	19.73	V
4873.594	44.91	-37.78	32.18	50.51	74.00	74.00	H
4984.688	47.27	-37.62	32.46	52.43	74.00	74.00	V
7311.094	41.47	-36.89	35.96	42.41	74.00	74.00	H
9748.125	45.11	-35.67	37.80	42.98	74.00	74.00	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2492.931	58.46	2.72	27.70	28.05	74.00	19.61	V
2493.769	58.22	2.72	27.70	27.80	74.00	19.73	H
4923.750	41.90	-38.13	32.31	47.72	74.00	74.00	V
4988.906	47.12	-37.68	32.47	52.33	74.00	74.00	H
7386.094	43.06	-36.76	36.13	43.68	74.00	74.00	H
9847.969	44.53	-35.61	37.80	42.34	74.00	74.00	V

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.608	55.89	2.62	27.66	25.61	74.00	18.11	H
2389.730	55.91	2.62	27.66	25.63	74.00	18.09	H
4815.469	42.46	-37.80	32.04	48.22	74.00	31.54	H
4982.812	47.47	-37.60	32.46	52.61	74.00	26.53	H
7236.094	40.93	-36.90	35.78	42.06	74.00	33.07	V
9647.812	44.56	-35.74	37.80	42.50	74.00	29.44	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2313.250	40.87	-40.51	27.63	53.75	74.00	33.13	V
2508.125	45.11	-39.34	27.72	56.72	74.00	28.89	H
4868.438	40.40	-37.80	32.17	46.03	74.00	74.00	H
4992.656	47.40	-37.73	32.48	52.65	74.00	74.00	H
7310.625	42.51	-36.89	35.96	43.45	74.00	74.00	H
9748.594	45.23	-35.67	37.80	43.10	74.00	74.00	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2486.787	59.95	2.67	27.70	29.59	74.00	19.61	H
2486.844	59.94	2.67	27.70	29.58	74.00	19.73	H
4924.219	38.22	-38.14	32.31	44.05	74.00	74.00	H
4977.656	48.31	-37.67	32.44	53.54	74.00	74.00	H
7386.094	42.30	-36.76	36.13	42.93	74.00	74.00	H
9848.969	44.52	-35.61	37.80	42.33	74.00	74.00	V

802.11ax-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.083	57.97	2.6	27.7	27.68	74.0	16.0	H
2389.398	57.58	2.6	27.7	27.29	74.0	16.4	V
4824.844	42.30	-37.8	32.1	48.07	74.0	31.7	H
4979.531	47.88	-37.6	32.4	53.07	74.0	26.1	V
7236.094	41.10	-36.9	35.8	42.23	74.0	32.9	V
9648.813	42.81	-35.7	37.8	40.74	74.0	31.2	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2341.875	40.65	-40.2	27.6	53.24	74.0	33.3	V
2559.625	41.57	-40.0	27.9	53.73	74.0	32.4	H
4870.313	41.03	-37.8	32.2	46.65	74.0	74.0	H
4987.500	47.83	-37.7	32.5	53.02	74.0	74.0	H
7911.094	41.14	-36.4	36.7	40.77	74.0	74.0	H
9748.125	44.92	-35.7	37.8	42.79	74.0	74.0	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.469	60.92	2.7	27.7	30.58	74.0	13.1	V
2484.913	62.18	2.7	27.7	31.83	74.0	11.8	V
4924.219	37.34	-38.1	32.3	43.16	74.0	36.7	V
4976.250	47.53	-37.7	32.4	52.78	74.0	26.5	H
7386.094	41.77	-36.8	36.1	42.40	74.0	32.2	H
9847.969	44.26	-35.6	37.8	42.07	74.0	29.7	H

802.11ax-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2383.045	54.44	2.6	27.7	24.16	74.0	19.6	H
2389.678	54.67	2.6	27.7	24.39	74.0	19.3	H
4844.063	37.89	-37.9	32.1	43.64	74.0	36.1	V
4992.656	47.10	-37.7	32.5	52.35	74.0	26.9	V
7266.094	40.15	-36.9	35.8	41.16	74.0	33.9	H
9688.125	44.35	-35.7	37.8	42.25	74.0	29.6	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2364.500	47.07	-39.7	27.7	59.10	74.0	26.9	H
2506.000	52.13	-39.2	27.7	63.66	74.0	21.9	V
4873.125	40.56	-37.8	32.2	46.16	74.0	74.0	V
4997.344	46.98	-37.8	32.5	52.28	74.0	74.0	H
7311.094	41.48	-36.9	36.0	42.41	74.0	74.0	V
9748.125	45.48	-35.7	37.8	43.35	74.0	74.0	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2490.081	63.47	2.7	27.7	33.08	74.0	10.5	H
2493.469	62.32	2.7	27.7	31.90	74.0	11.7	H
4904.063	37.96	-37.9	32.3	43.64	74.0	36.0	V
4975.781	47.16	-37.7	32.4	52.42	74.0	26.8	V
7356.094	40.96	-36.9	36.1	41.78	74.0	33.0	V
9808.125	43.84	-35.7	37.8	41.70	74.0	30.2	H

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.625	57.61	2.62	27.66	27.32	74.00	16.39	H
2389.765	57.71	2.62	27.66	27.43	74.00	16.29	H
4827.656	41.29	-37.84	32.07	47.07	74.00	32.71	H
4986.094	47.36	-37.64	32.47	52.53	74.00	26.64	V
7236.094	40.29	-36.90	35.78	41.41	74.00	33.71	V
9647.812	44.24	-35.74	37.80	42.18	74.00	29.76	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2298.500	40.55	-40.52	27.62	53.45	74.00	33.45	V
2560.125	40.90	-40.03	27.87	53.07	74.00	33.10	V
4869.844	41.74	-37.79	32.17	47.36	74.00	74.00	H
4978.125	47.41	-37.66	32.45	52.63	74.00	74.00	H
7311.094	41.84	-36.89	35.96	42.78	74.00	74.00	V
9748.125	43.87	-35.67	37.80	41.74	74.00	74.00	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.981	62.19	2.65	27.69	31.85	74.00	11.81	V
2484.719	63.13	2.65	27.69	32.78	74.00	10.87	H
4924.219	38.58	-38.14	32.31	44.40	74.00	35.42	V
4980.469	47.50	-37.63	32.45	52.68	74.00	26.50	V
7386.094	42.43	-36.76	36.13	43.06	74.00	31.57	H
9847.969	44.08	-35.61	37.80	41.89	74.00	29.92	V

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.912	57.00	2.62	27.66	26.72	74.00	17.00	V
2387.052	57.35	2.62	27.66	27.07	74.00	16.65	V
4844.062	38.69	-37.86	32.11	44.44	74.00	35.31	H
4983.344	47.36	-37.60	32.46	52.50	74.00	26.64	V
7266.094	40.93	-36.86	35.85	41.95	74.00	33.07	V
9688.125	44.87	-35.70	37.80	42.76	74.00	29.13	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2366.750	49.39	-39.60	27.65	61.35	74.00	24.61	V
2501.500	52.97	-39.06	27.70	64.32	74.00	21.03	V
4874.531	39.93	-37.78	32.19	45.53	74.00	74.00	H
4993.125	47.70	-37.73	32.48	52.95	74.00	74.00	H
7311.094	40.82	-36.89	35.96	41.75	74.00	74.00	V
9748.125	44.87	-35.67	37.80	42.74	74.00	74.00	H

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2489.175	63.61	2.69	27.70	33.23	74.00	10.39	H
2489.244	64.40	2.69	27.70	34.02	74.00	9.60	H
4904.062	37.52	-37.94	32.26	43.20	74.00	36.48	H
4989.375	47.74	-37.68	32.47	52.95	74.00	26.26	H
7356.094	41.84	-36.89	36.06	42.67	74.00	32.16	V
9808.125	44.51	-35.66	37.80	42.37	74.00	29.49	V

Average
802.11b
Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.000	41.42	2.62	27.66	11.14	54.00	12.58	V
2386.375	41.40	2.62	27.66	11.11	54.00	12.60	V
4823.750	42.41	-37.83	32.06	48.18	54.00	11.59	V
4998.125	30.83	-37.80	32.50	36.14	54.00	23.17	H
7236.250	30.60	-36.90	35.78	31.73	54.00	23.40	H
9648.125	34.26	-35.74	37.80	32.20	54.00	19.74	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2424.375	43.43	2.63	27.67	13.13	54.00	12.58	V
2449.875	51.55	2.63	27.68	21.24	54.00	12.60	V
4873.750	39.55	-37.78	32.18	45.15	54.00	54.00	H
4988.125	30.61	-37.67	32.47	35.80	54.00	54.00	H
7311.250	30.92	-36.89	35.96	31.86	54.00	54.00	H
9478.125	34.34	-36.17	37.77	32.74	54.00	54.00	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	43.92	2.64	27.69	13.59	54.00	12.58	V
2484.750	43.51	2.65	27.69	13.16	54.00	12.60	V
4923.750	36.11	-38.13	32.31	41.93	54.00	54.00	V
4995.625	30.44	-37.77	32.49	35.72	54.00	54.00	H
7386.250	32.95	-36.76	36.13	33.57	54.00	54.00	H
9878.125	33.63	-35.58	37.80	31.40	54.00	54.00	V

802.11g

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.625	41.72	2.62	27.66	11.44	54.00	12.28	V
2388.875	41.77	2.62	27.66	11.49	54.00	12.23	V
4823.125	31.98	-37.83	32.06	37.75	54.00	22.02	V
4997.500	30.42	-37.80	32.49	35.72	54.00	23.58	V
7236.250	30.50	-36.90	35.78	31.63	54.00	23.50	H
9648.125	33.87	-35.74	37.80	31.80	54.00	20.13	H

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2417.750	42.65	2.63	27.67	12.36	54.00	12.58	V
2455.875	45.60	2.61	27.68	15.30	54.00	12.60	V
4872.500	31.40	-37.79	32.18	37.01	54.00	54.00	H
4981.875	30.32	-37.62	32.46	35.48	54.00	54.00	H
7311.250	30.84	-36.89	35.96	31.78	54.00	54.00	H
9748.125	34.36	-35.67	37.80	32.23	54.00	54.00	H

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.750	44.35	2.65	27.69	14.01	54.00	12.58	V
2484.250	44.41	2.65	27.69	14.06	54.00	12.60	V
4916.250	29.21	-38.06	32.29	34.98	54.00	54.00	V
4976.875	30.88	-37.68	32.44	36.12	54.00	54.00	V
7386.250	32.66	-36.76	36.13	33.28	54.00	54.00	V
9848.125	34.34	-35.61	37.80	32.15	54.00	54.00	H

802.11ax-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.000	42.30	2.6	27.7	12.02	54.0	11.7	V
2388.750	42.34	2.6	27.7	12.06	54.0	11.7	V
4816.250	31.28	-37.8	32.0	37.04	54.0	22.7	H
4993.125	30.83	-37.7	32.5	36.09	54.0	23.2	H
7236.250	30.49	-36.9	35.8	31.62	54.0	23.5	H
9648.125	33.95	-35.7	37.8	31.89	54.0	20.0	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2419.625	43.53	2.6	27.7	13.23	54.0	12.6	V
2455.750	45.77	2.6	27.7	15.48	54.0	12.6	V
4876.875	30.66	-37.8	32.2	36.24	54.0	54.0	H
4998.125	60.40	-37.8	32.5	65.71	54.0	54.0	H
7311.250	30.75	-36.9	36.0	31.69	54.0	54.0	H
9748.125	34.39	-35.7	37.8	32.26	54.0	54.0	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.625	45.16	2.6	27.7	14.82	54.0	8.8	V
2483.750	45.05	2.6	27.7	14.71	54.0	9.0	V
4924.375	29.52	-38.1	32.3	35.34	54.0	24.5	V
4980.000	31.16	-37.6	32.5	36.34	54.0	22.8	H
7386.250	32.53	-36.8	36.1	33.16	54.0	21.5	V
9878.125	34.17	-35.6	37.8	31.95	54.0	19.8	H

802.11ax-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2388.500	41.37	2.6	27.7	11.09	54.0	12.6	V
2389.625	41.49	2.6	27.7	11.20	54.0	12.5	V
4843.750	29.12	-37.9	32.1	34.88	54.0	24.9	H
4997.500	31.42	-37.8	32.5	36.72	54.0	22.6	V
7266.250	30.78	-36.9	35.8	31.79	54.0	23.2	H
9688.125	34.15	-35.7	37.8	32.04	54.0	19.9	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2405.250	44.33	2.6	27.7	14.04	54.0	12.6	V
2469.875	49.13	2.6	27.7	18.87	54.0	12.6	V
4873.750	29.74	-37.8	32.2	35.34	54.0	54.0	V
4992.500	30.91	-37.7	32.5	36.15	54.0	54.0	H
7311.250	31.04	-36.9	36.0	31.98	54.0	54.0	H
9748.125	34.41	-35.7	37.8	32.28	54.0	54.0	V

Ch9

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	47.60	2.6	27.7	17.27	54.0	6.4	V
2483.750	47.52	2.6	27.7	17.18	54.0	6.5	V
4903.750	28.48	-37.9	32.3	34.16	54.0	25.5	H
4983.750	30.41	-37.6	32.5	35.55	54.0	23.6	H
7356.250	31.69	-36.9	36.1	32.51	54.0	22.3	H
9808.125	34.23	-35.7	37.8	32.09	54.0	19.8	V

802.11n-HT20

Ch1

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2389.500	42.30	2.62	27.66	12.02	54.00	11.70	V
2389.975	42.38	2.62	27.66	12.09	54.00	11.62	V
4823.750	32.07	-37.83	32.06	37.84	54.00	21.93	H
4976.250	31.26	-37.69	32.44	36.51	54.00	22.74	V
7236.250	30.62	-36.90	35.78	31.75	54.00	23.38	V
9648.125	33.68	-35.74	37.80	31.61	54.00	20.32	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2419.000	42.94	2.63	27.67	12.64	54.00	12.58	V
2455.875	46.14	2.61	27.68	15.84	54.00	12.60	V
4872.500	30.74	-37.79	32.18	36.34	54.00	54.00	H
4982.500	30.43	-37.61	32.46	35.58	54.00	54.00	V
7311.250	31.13	-36.89	35.96	32.07	54.00	54.00	V
9748.125	34.71	-35.67	37.80	32.58	54.00	54.00	V

Ch11

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.750	44.96	2.65	27.69	14.62	54.00	9.04	V
2484.500	44.83	2.65	27.69	14.48	54.00	9.17	V
4923.750	29.05	-38.13	32.31	34.87	54.00	24.95	V
4998.125	30.63	-37.80	32.50	35.94	54.00	23.37	V
7386.250	32.53	-36.76	36.13	33.16	54.00	21.47	V
9848.125	34.34	-35.61	37.80	32.16	54.00	19.66	V

802.11n-HT40

Ch3

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2386.625	41.90	2.62	27.66	11.62	54.00	12.10	V
2389.625	41.98	2.62	27.66	11.70	54.00	12.02	V
4843.750	28.85	-37.86	32.11	34.61	54.00	25.15	H
4998.125	30.66	-37.80	32.50	35.97	54.00	23.34	V
7266.250	31.11	-36.86	35.85	32.12	54.00	22.89	V
9688.125	34.17	-35.70	37.80	32.06	54.00	19.83	V

Ch6

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2404.875	44.70	2.63	27.67	14.41	54.00	12.58	V
2480.250	48.08	2.62	27.69	17.77	54.00	12.60	V
4874.375	29.84	-37.78	32.19	35.44	54.00	54.00	H
4995.000	30.76	-37.76	32.49	36.03	54.00	54.00	H
7311.250	31.06	-36.89	35.96	32.00	54.00	54.00	V
9748.125	34.40	-35.67	37.80	32.27	54.00	54.00	V

Ch9

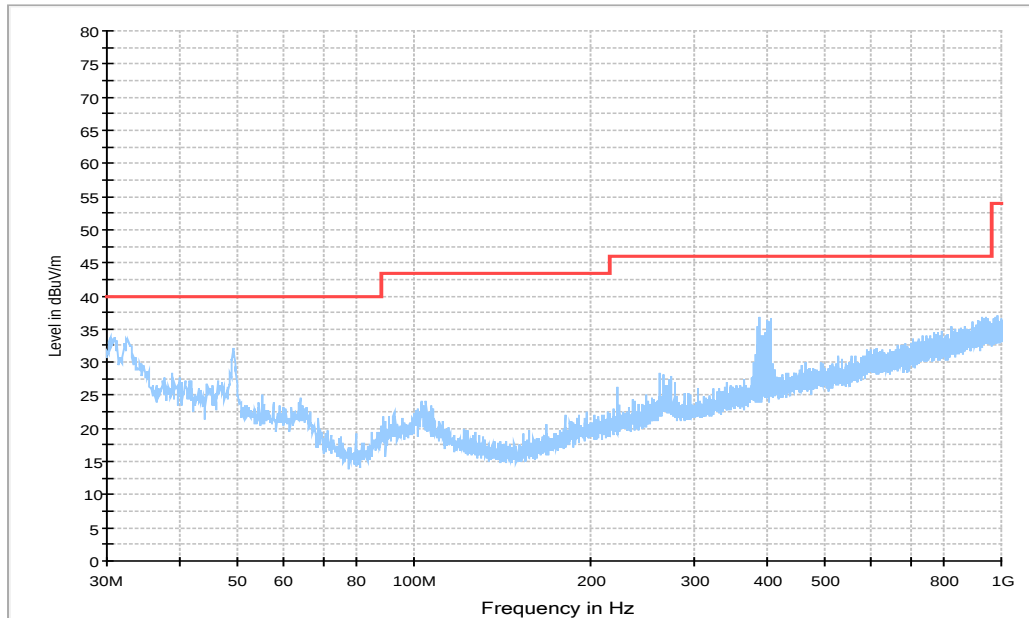
Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2483.500	47.55	2.64	27.69	17.21	54.00	6.45	V
2489.125	47.44	2.69	27.70	17.06	54.00	6.56	V
4903.750	28.57	-37.94	32.26	34.25	54.00	25.43	V
4996.875	30.66	-37.79	32.49	35.95	54.00	23.34	H
7356.250	32.09	-36.89	36.06	32.91	54.00	21.91	H
9808.125	34.70	-35.66	37.80	32.56	54.00	19.30	V

Note: the spurious emission above 18G is noise only.

Conclusion: Pass

C.1.2 Radiated Spurious Emission- Below 1GHz

WOSRT CASE BELOW 1GHz



BELOW 30MHz

No emissions were found within 20dB of the limit below 30MHz.

C.1.3 Band Edges Compliance– Radiated

SPEED

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.1	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.2	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.3	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.4	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.5	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.6	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.31GHz ~2.43GHz	Fig.C.1.3.7	P
	Power(ch9)	2.45GHz ~2.5GHz	Fig.C.1.3.8	P

802.11ax-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.9	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.10	P

802.11ax-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.31GHz ~2.43GHz	Fig.C.1.3.11	P
	Power(ch9)	2.45GHz ~2.5GHz	Fig.C.1.3.12	P

The measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this section.

Conclusion: PASS

AWAN

802.11b mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11b	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.13	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.14	P

802.11g mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11g	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.15	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.16	P

802.11n-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.17	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.18	P

802.11n-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.31GHz ~2.43GHz	Fig.C.1.3.19	P
	Power(ch9)	2.45GHz ~2.5GHz	Fig.C.1.3.20	P

802.11ax-HT20 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT20)	Power(ch1)	2.31GHz ~2.43GHz	Fig.C.1.3.21	P
	Power(ch11)	2.45GHz ~2.5GHz	Fig.C.1.3.22	P

802.11ax-HT40 mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n(HT40)	Power(ch3)	2.31GHz ~2.43GHz	Fig.C.1.3.23	P
	Power(ch9)	2.45GHz ~2.5GHz	Fig.C.1.3.24	P

The measurements were performed separately in Chain A, Chain B, and MIMO (Chain A+B), and only the worst cases are shown in this section.

Conclusion: PASS

Test graphs as below:

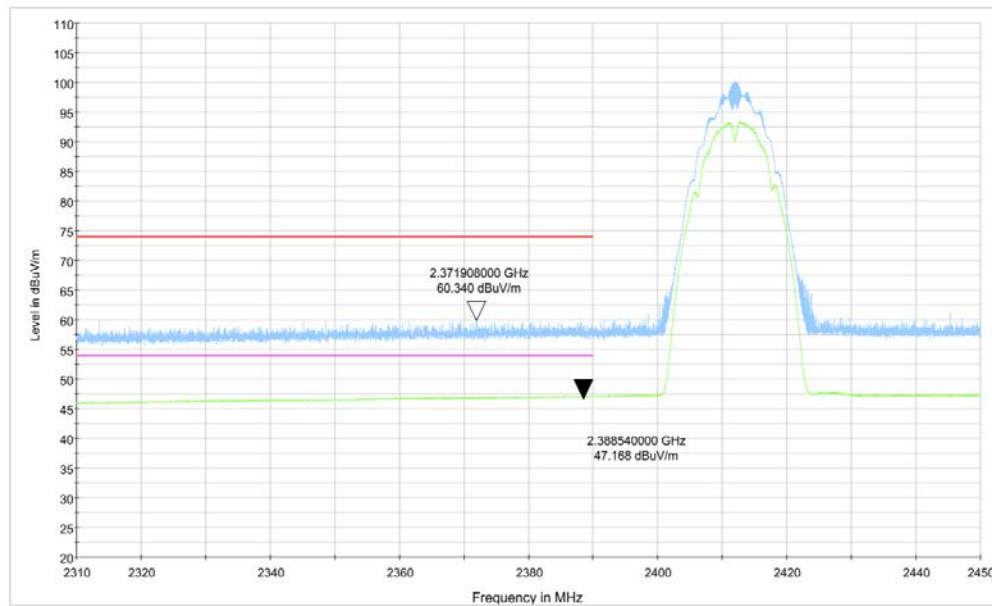


Fig.C.1.3.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

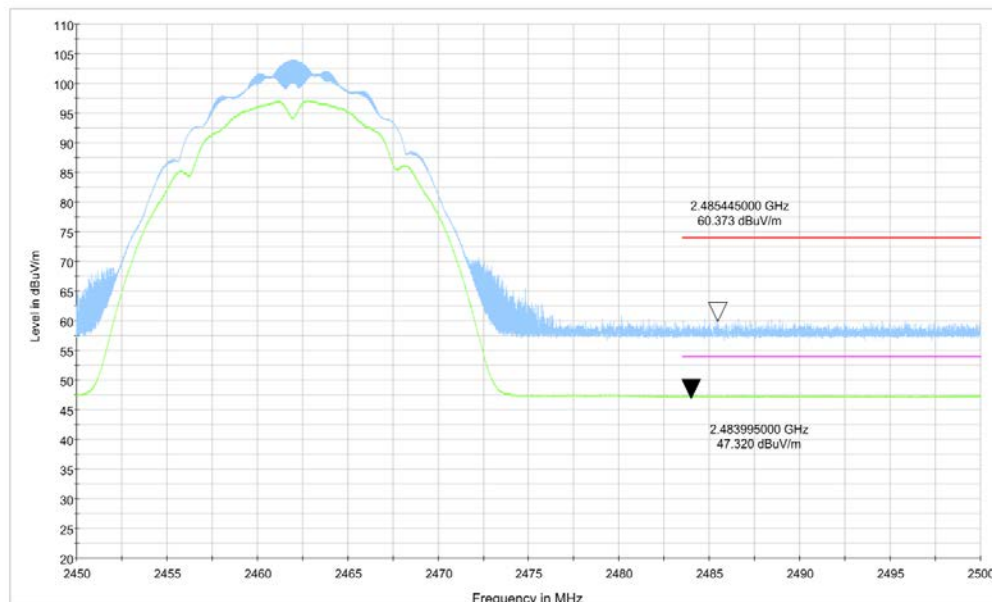


Fig.C.1.3.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

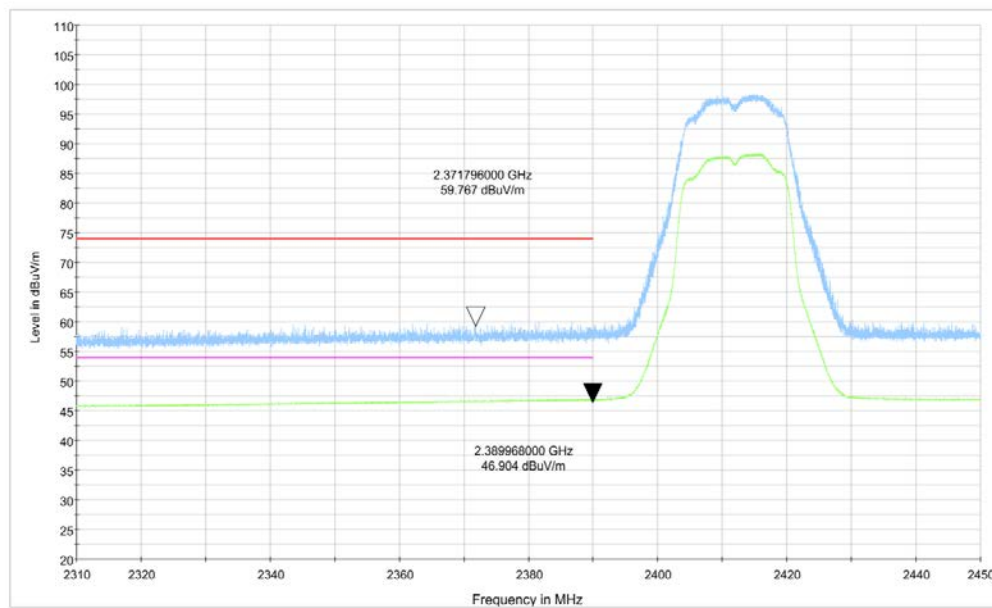


Fig.C.1.3.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz

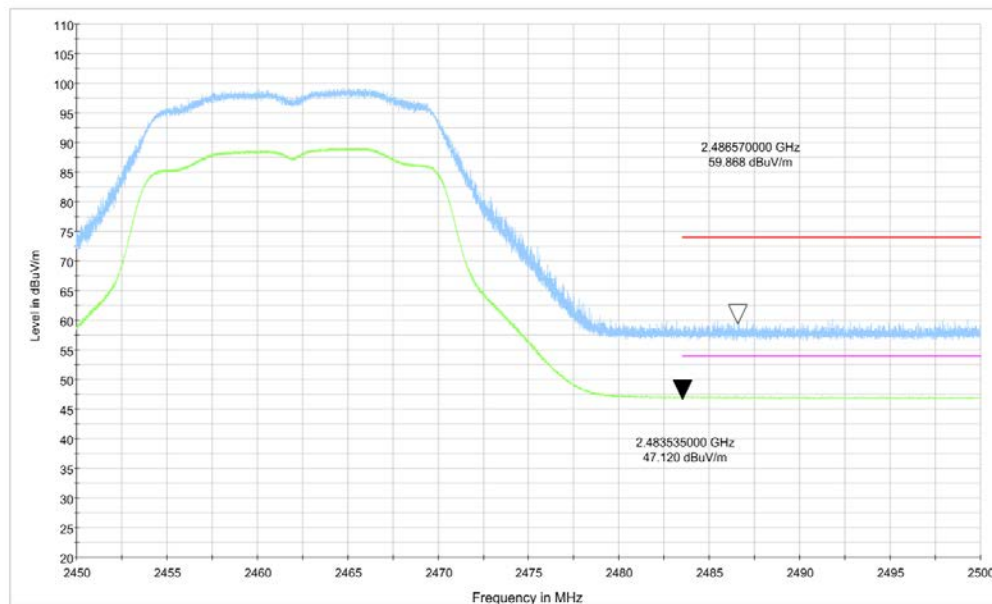


Fig.C.1.3.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

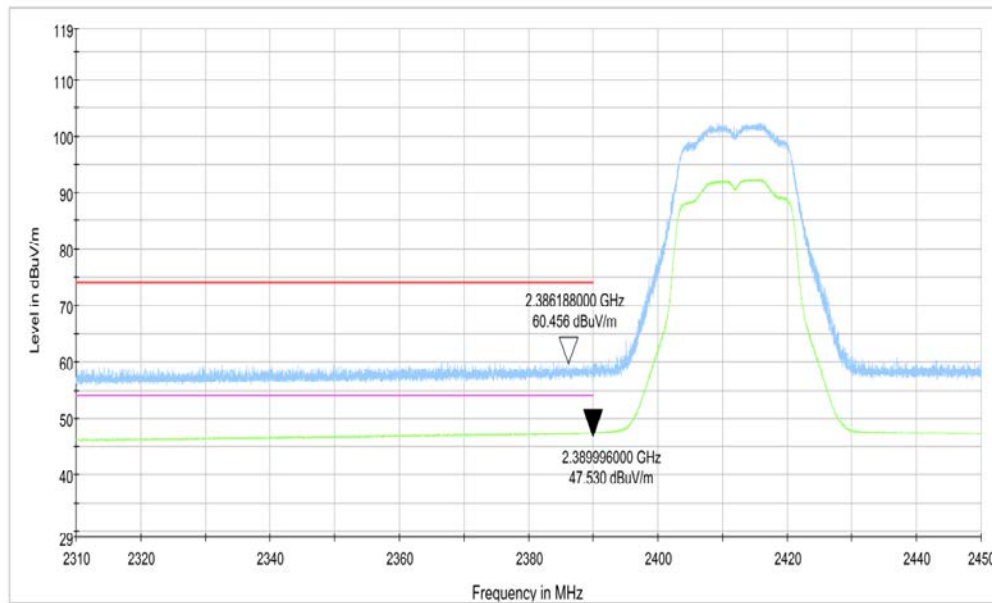


Fig.C.1.3.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz

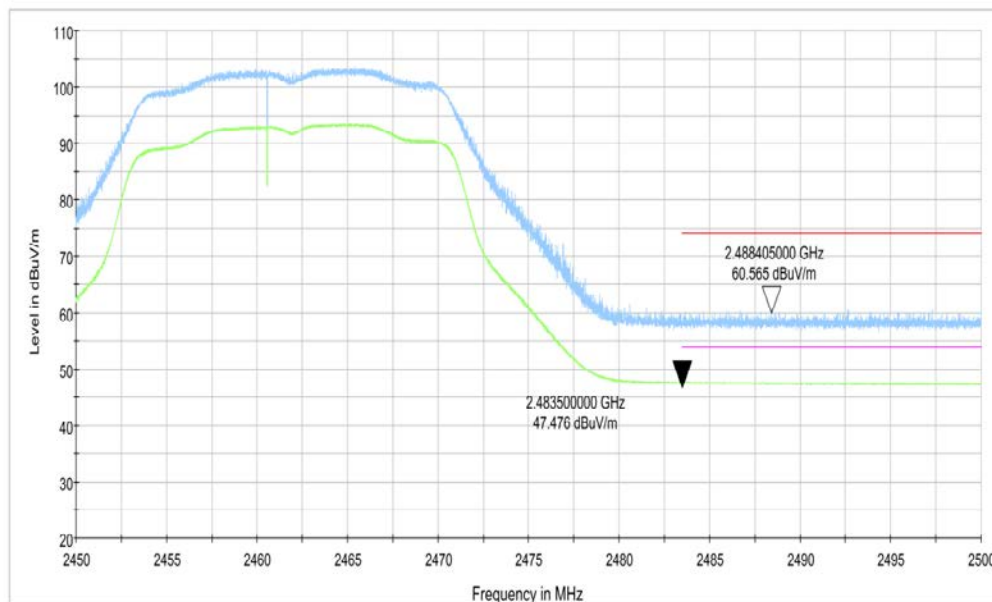


Fig.C.1.3.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

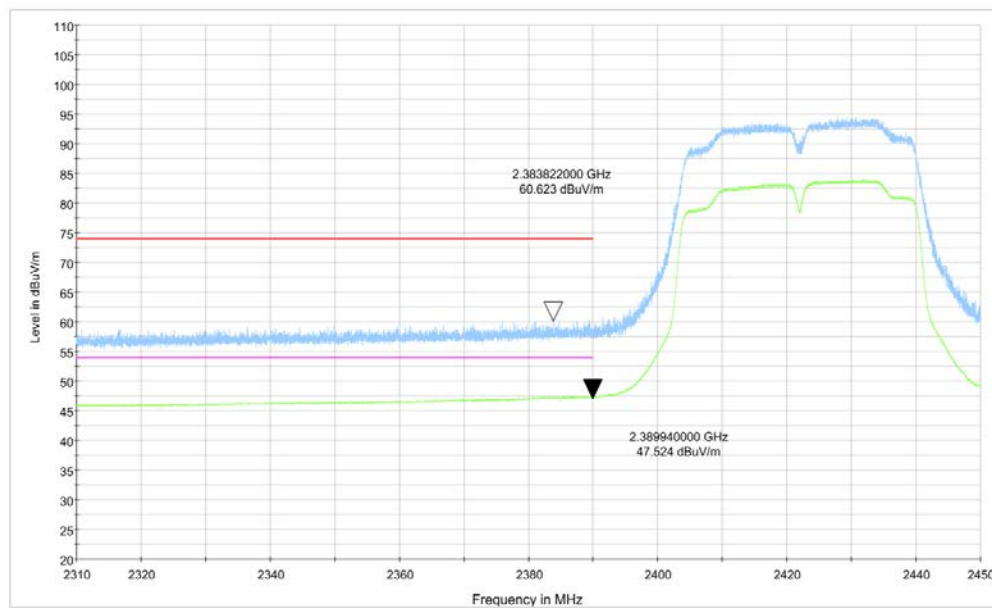


Fig.C.1.3.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.45GHz

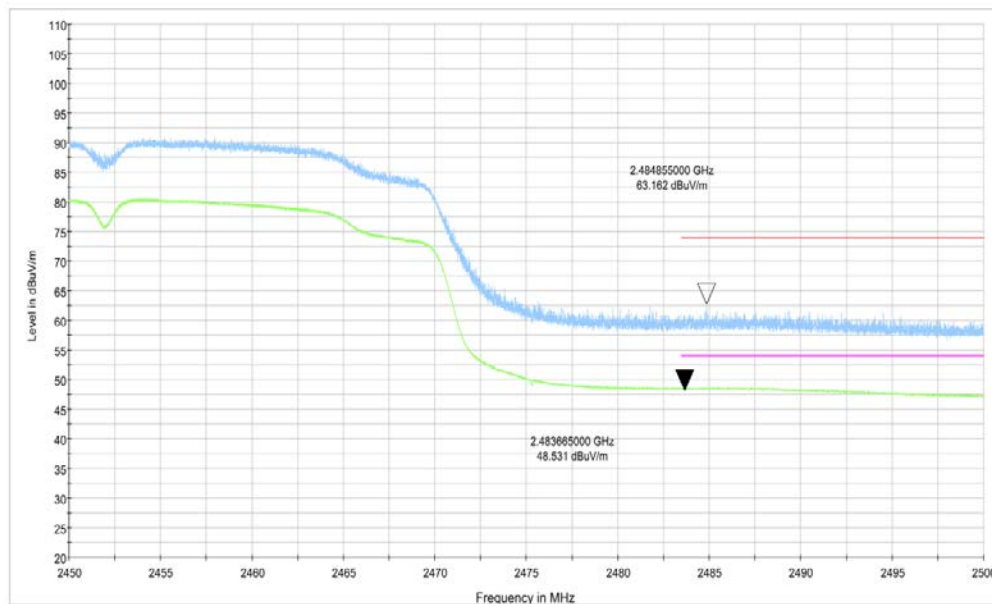


Fig.C.1.3.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz

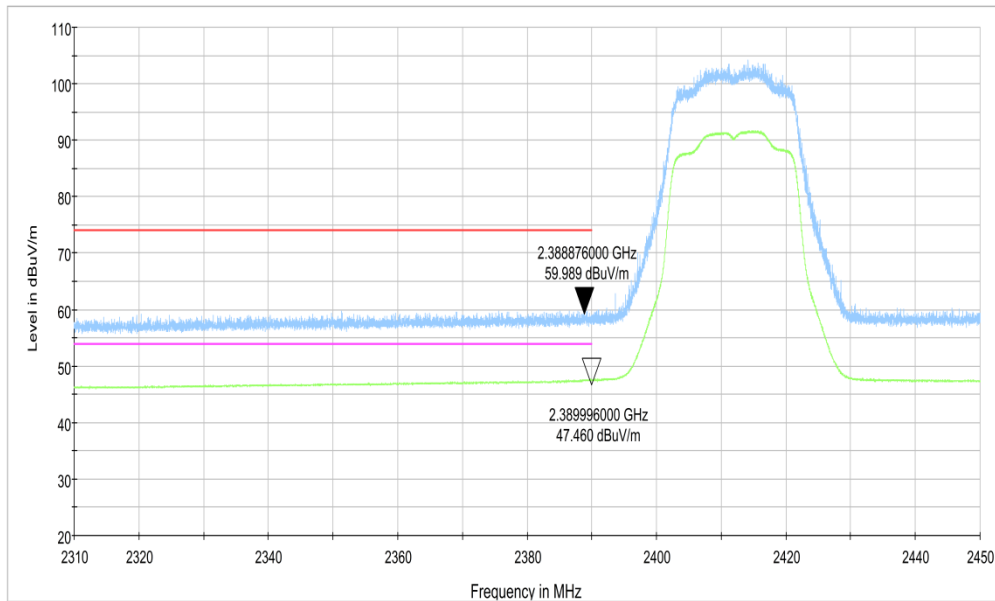


Fig.C.1.3.9 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch1, 2.31GHz - 2.45GHz

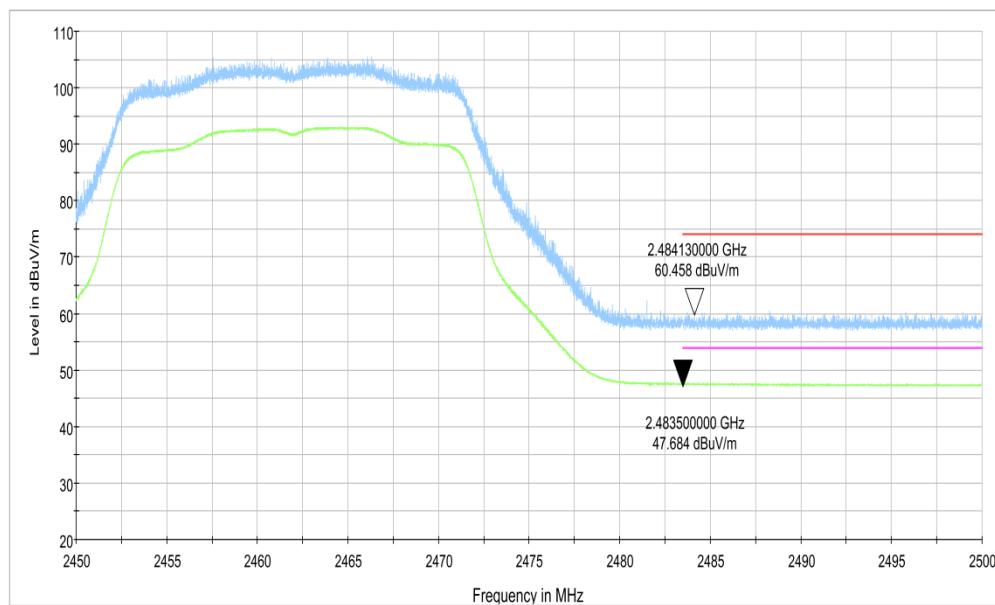


Fig.C.1.3.10 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch11, 2.45 GHz - 2.50GHz

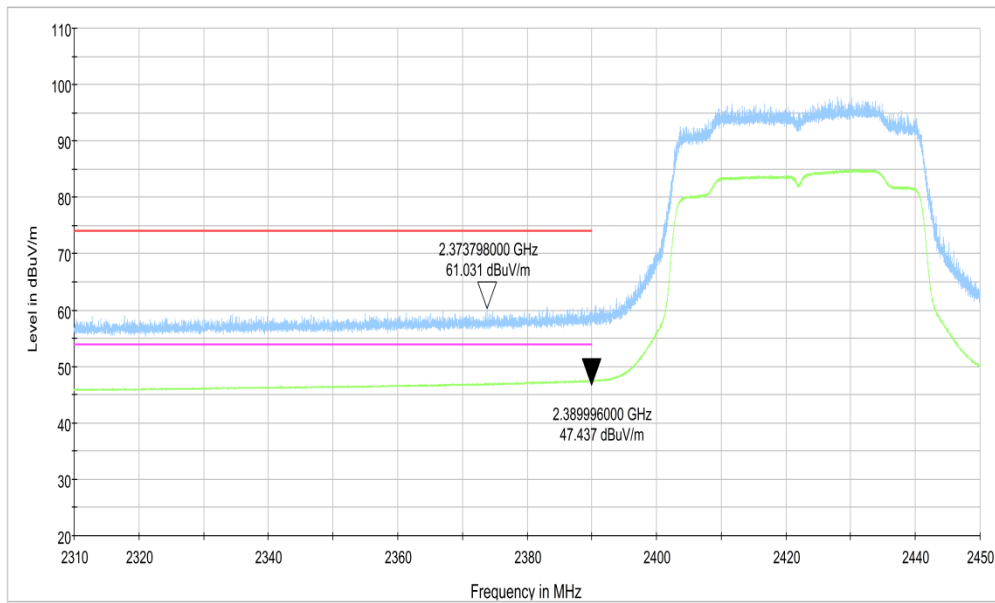


Fig.C.1.3.11 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch3, 2.31GHz - 2.45GHz

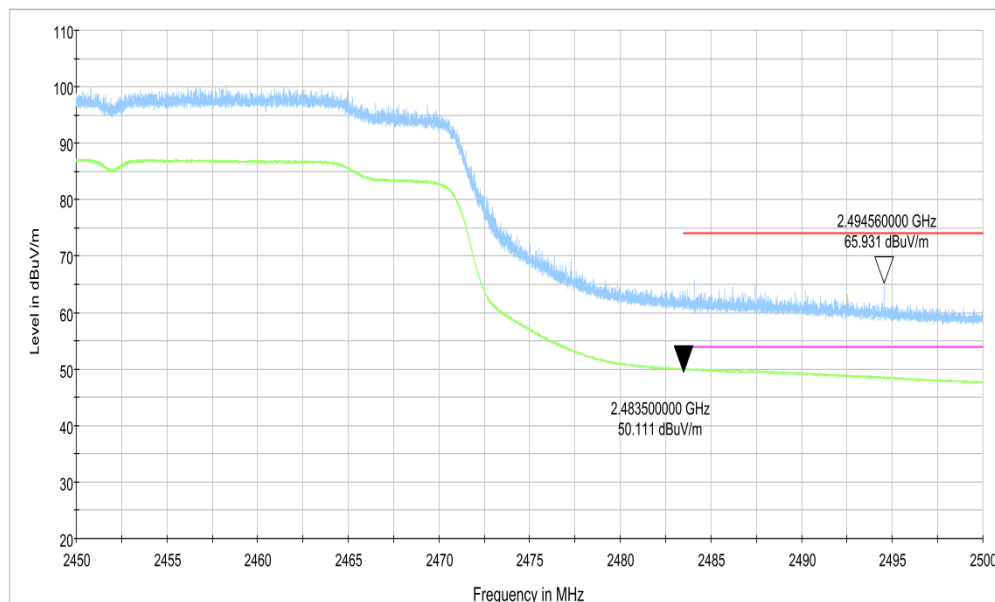


Fig.C.1.3.12 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch9, 2.45 GHz - 2.50GHz

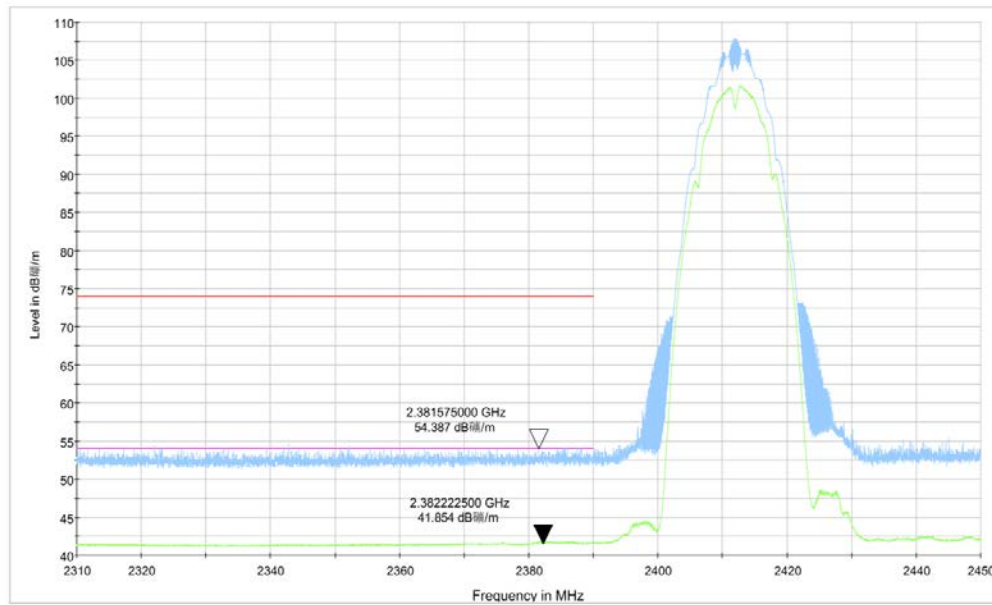


Fig.C.1.3.13 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.31 GHz – 2.45GHz

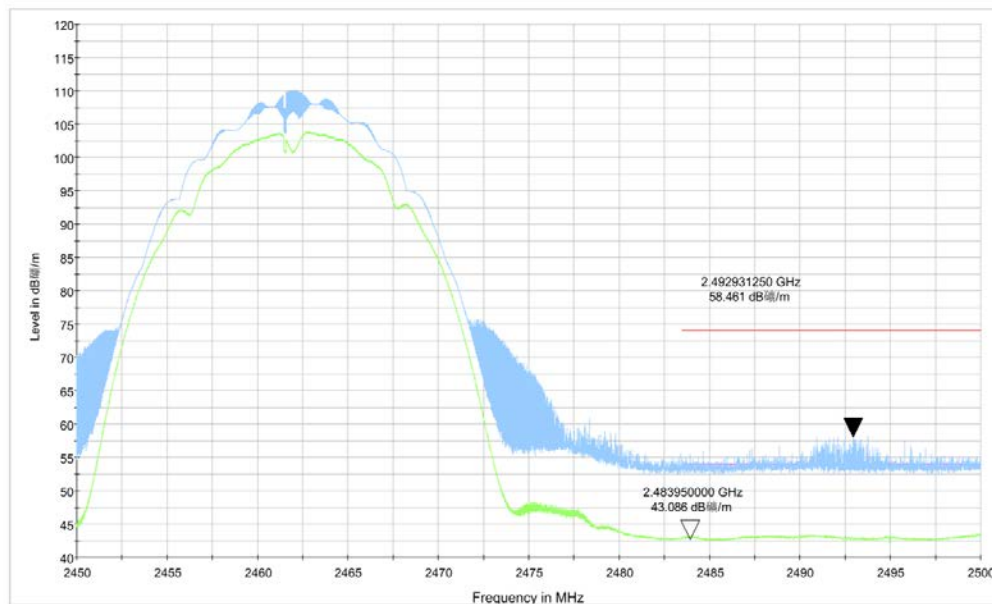


Fig.C.1.3.14 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz

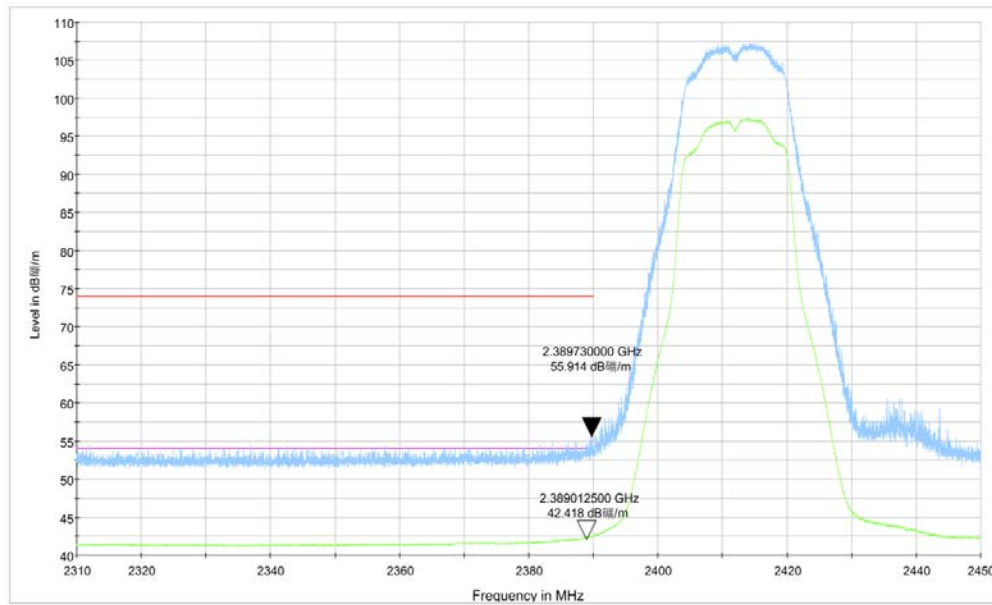


Fig.C.1.3.15 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.31 GHz - 2.45GHz

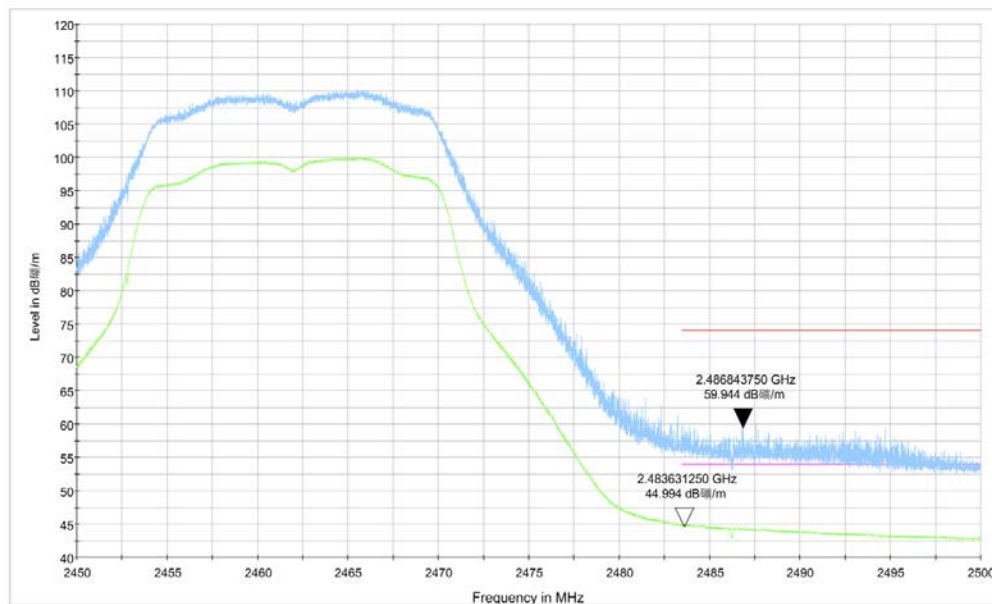


Fig.C.1.3.16 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz

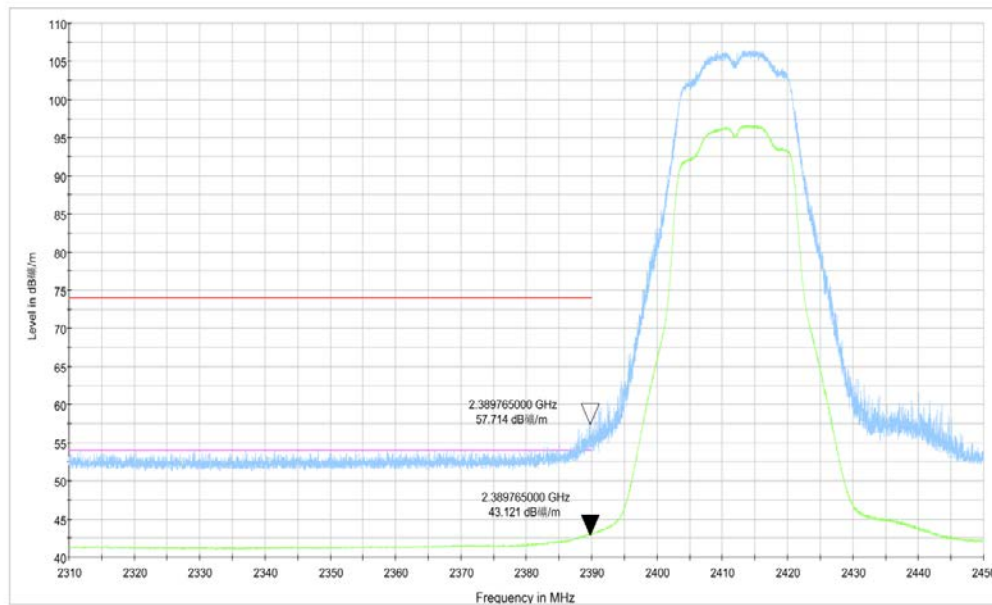


Fig.C.1.3.17 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1,
2.31 GHz - 2.45GHz

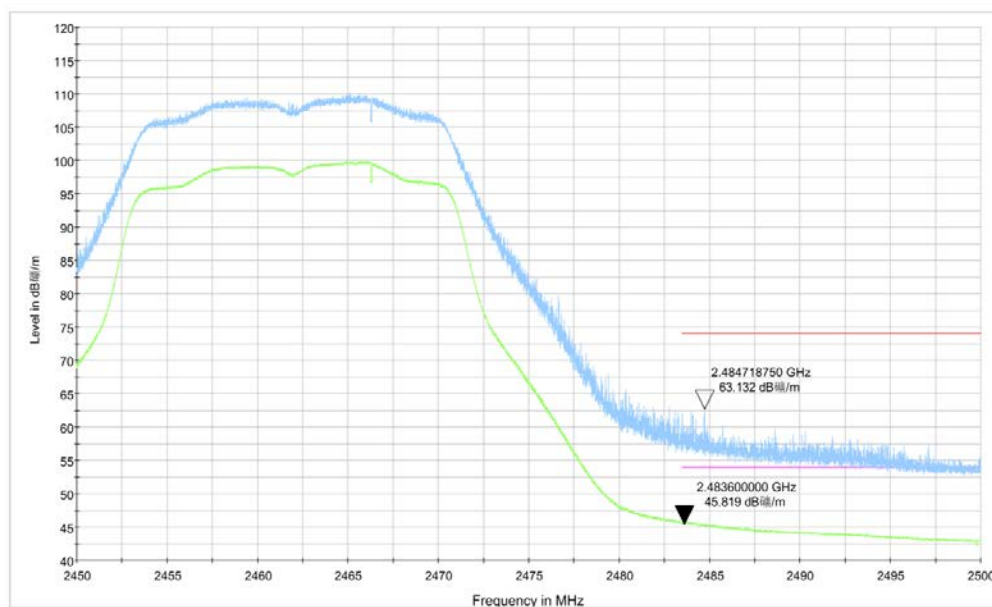


Fig.C.1.3.18 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11,
2.45 GHz - 2.50GHz

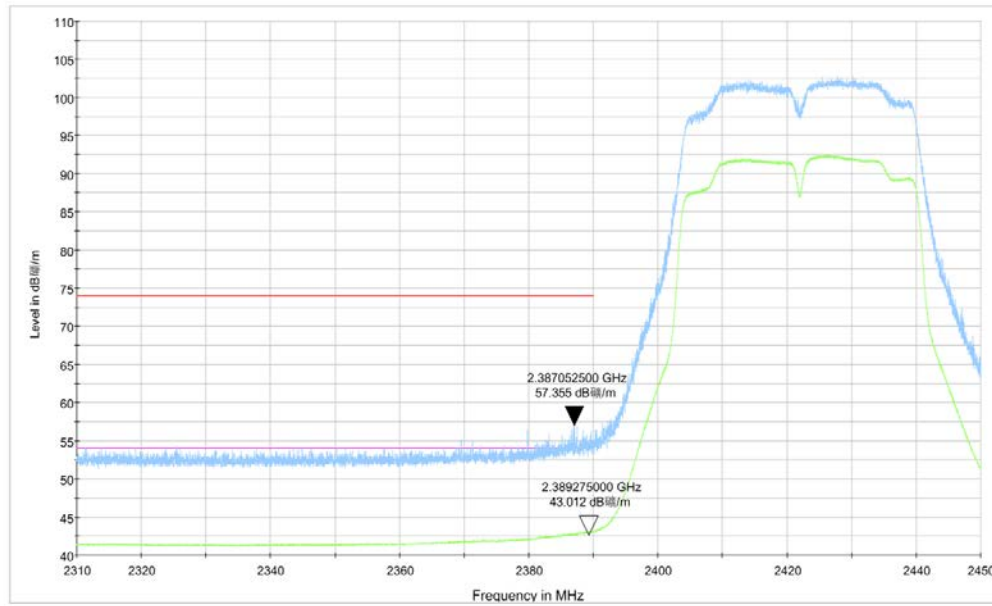


Fig.C.1.3.19 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3,
2.31 GHz - 2.45GHz

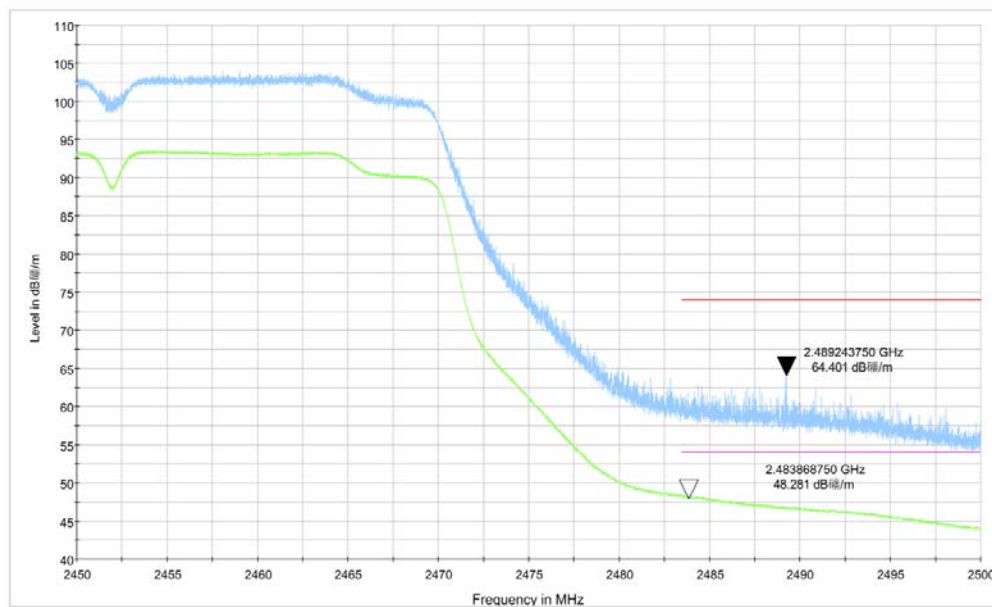


Fig.C.1.3.20 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9,
2.45 GHz - 2.50GHz

RE - Power-2.31GHz-2.45GHz

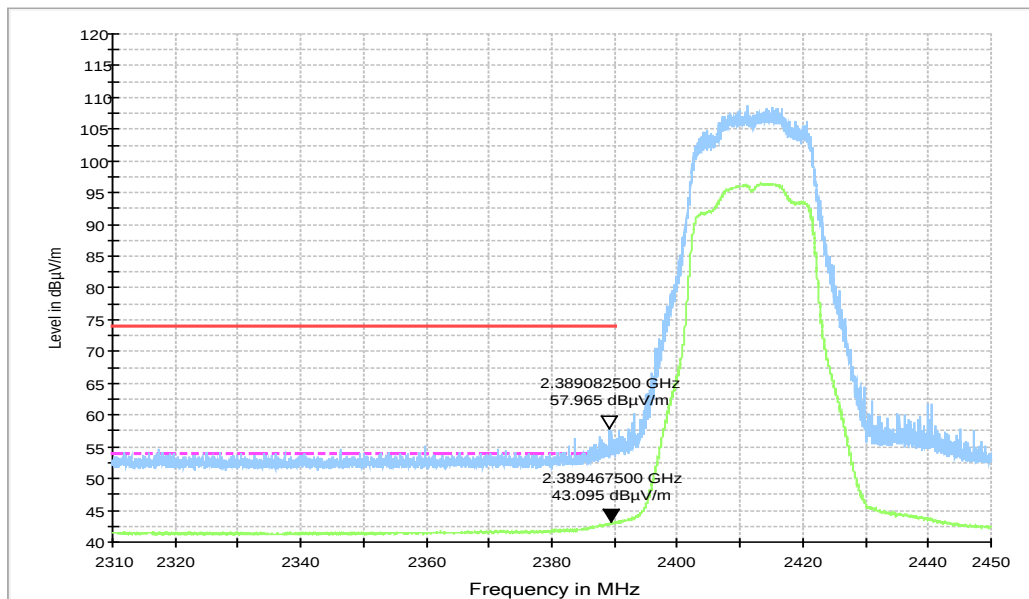


Fig.C.1.3.21 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch1,
2.31GHz - 2.45GHz

RE - Power-2.45GHz-2.50GHz

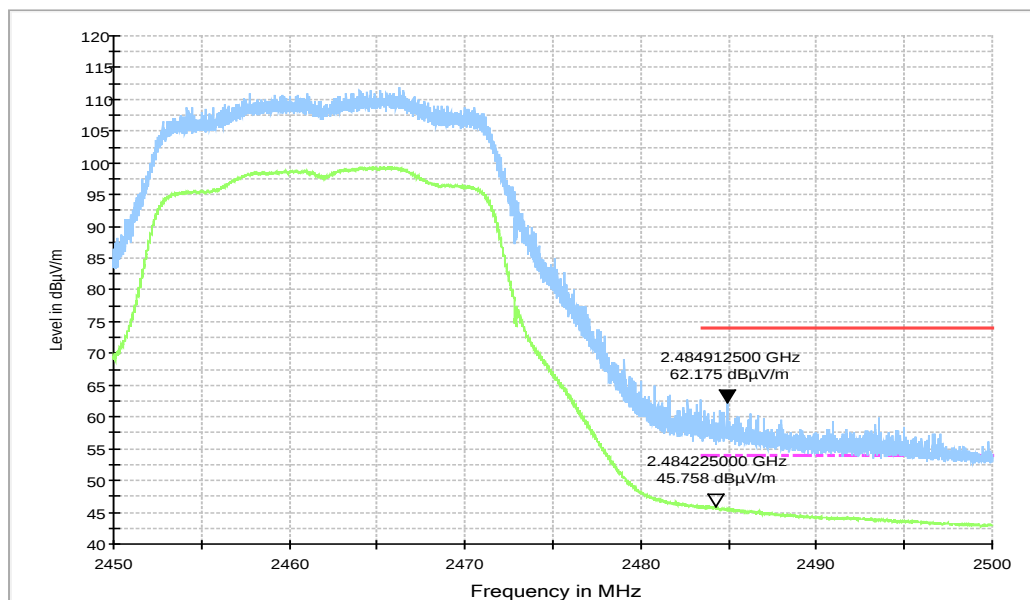


Fig.C.1.3.22 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT20, ch11,
2.45 GHz - 2.50GHz

RE - Power-2.31GHz-2.45GHz

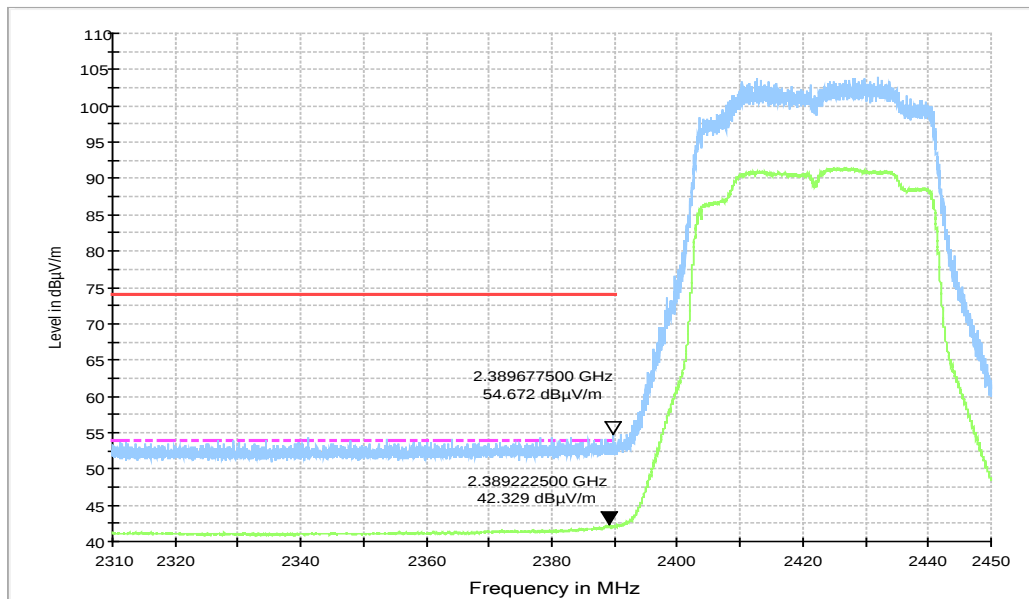


Fig.C.1.3.23 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch3,
2.31GHz - 2.45GHz

RE - Power-2.45GHz-2.50GHz

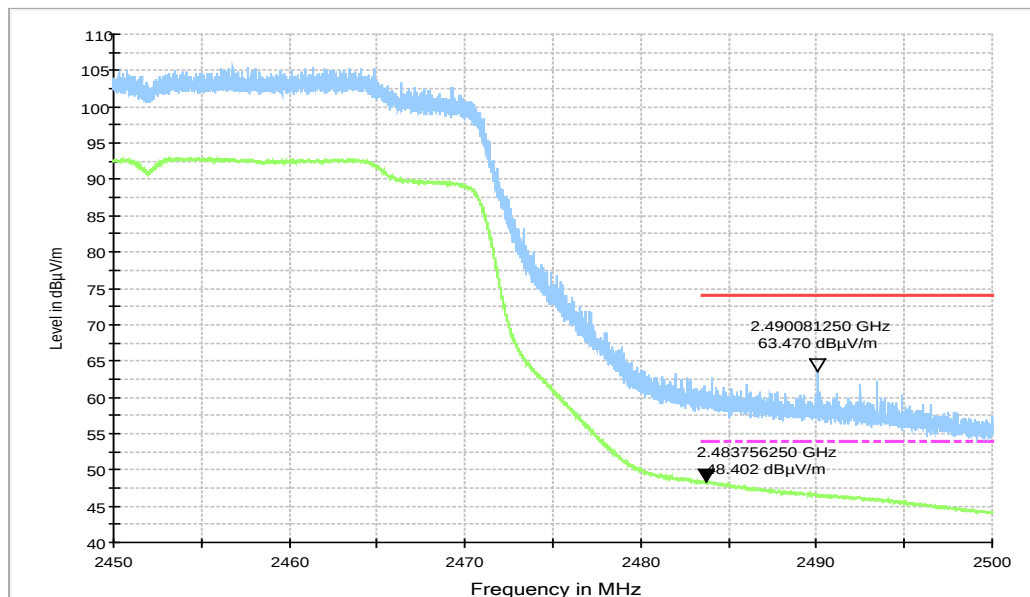


Fig.C.1.3.24 Transmitter Spurious Emission - Radiated (Power): 802.11ax-HT40, ch9,
2.45 GHz - 2.50GHz

C.2. AC Power-line Conducted Emission

Specification Reference

FCC 47 CFR Part 15.207, 15.107

Method of Measurement

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

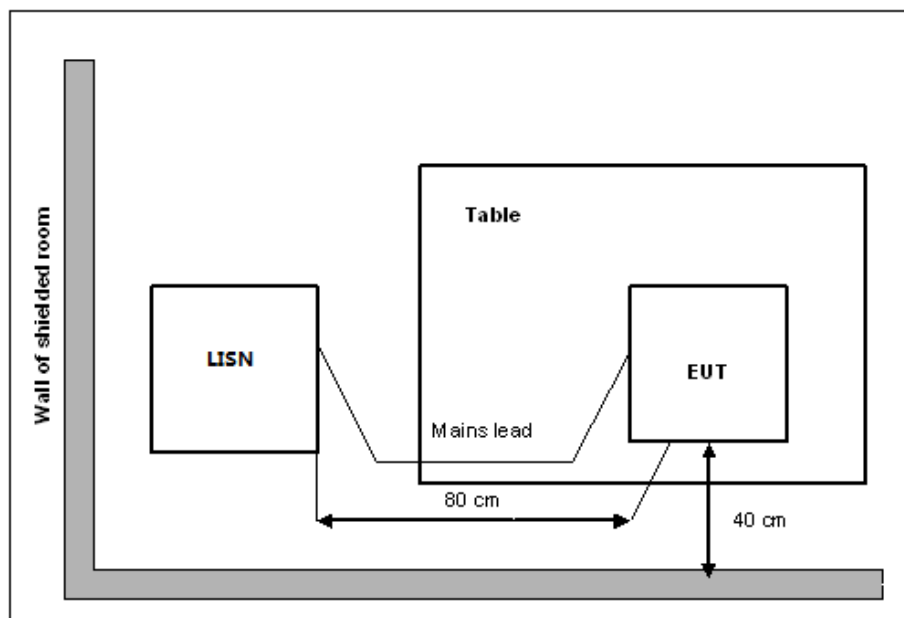
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth	Sweep Time(s)
0.15-30	9kHz	1

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Setup



EUT Operating Mode and Test Conditions

The measurement of EUT is carried out under the transmit state.

The EUT is powered by an AC/travel adapter.

Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.C.2.1	Fig.C.2.2	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.C.2.1	Fig.C.2.2	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Note: all modes have been tested and the worst results shown here.

Conclusion: Pass

Test graphs as below:

Traffic:

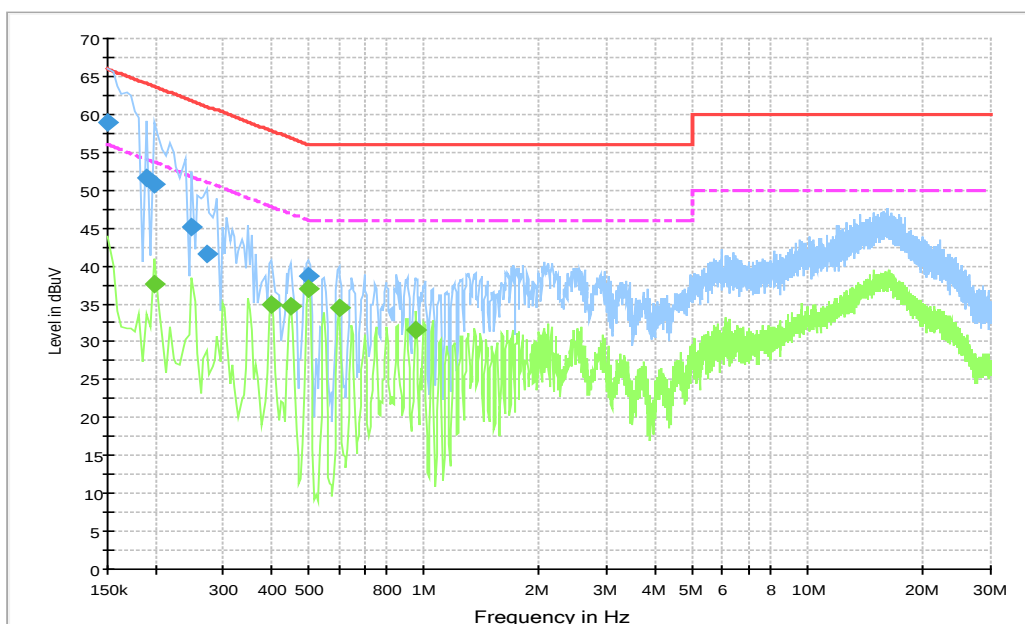


Fig.C.2.1 AC Powerline Conducted Emission-802.11b

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	58.8	1000.	9.000	N	19.6	7.2	66.0
0.190500	51.7	1000.	9.000	N	19.7	12.3	64.0
0.199500	50.8	1000.	9.000	L1	19.6	12.8	63.6
0.249000	45.1	1000.	9.000	L1	19.7	16.7	61.8
0.271500	41.5	1000.	9.000	L1	19.7	19.6	61.1
0.501000	38.8	1000.	9.000	N	19.8	17.2	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.199500	37.7	1000.0	9.000	L1	19.6	16.0	53.6
0.402000	34.8	1000.0	9.000	N	19.8	13.0	47.8
0.451500	34.7	1000.0	9.000	L1	19.8	12.1	46.8
0.501000	37.0	1000.0	9.000	N	19.8	9.0	46.0
0.600000	34.5	1000.0	9.000	N	19.7	11.5	46.0
0.955500	31.5	1000.0	9.000	N	19.7	14.5	46.0

Idle:

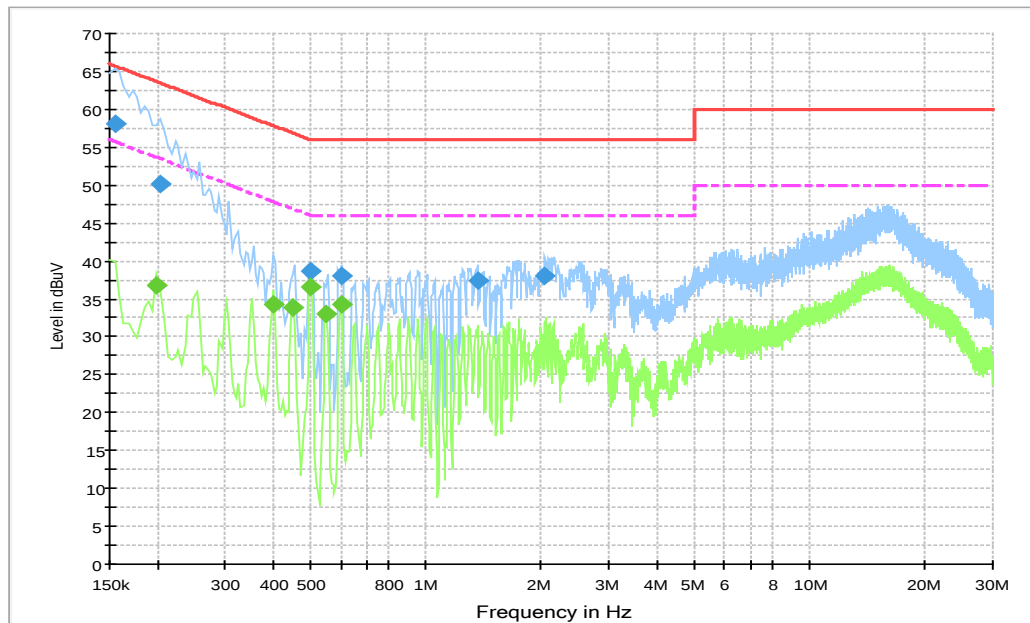


Fig.C.2.2 AC Powerline Conducted Emission-Idle

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.154500	58.0	1000.	9.000	L1	19.6	7.8	65.8
0.204000	50.2	1000.	9.000	L1	19.7	13.3	63.4
0.501000	38.6	1000.	9.000	N	19.8	17.4	56.0
0.604500	37.9	1000.	9.000	N	19.7	18.1	56.0
1.360500	37.5	1000.	9.000	N	19.6	18.5	56.0
2.044500	37.9	1000.	9.000	N	19.6	18.1	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.199500	36.7	1000.0	9.000	L1	19.6	16.9	53.6
0.402000	34.4	1000.0	9.000	L1	19.8	13.4	47.8
0.451500	33.9	1000.0	9.000	L1	19.8	13.0	46.8
0.501000	36.5	1000.0	9.000	N	19.8	9.5	46.0
0.550500	33.0	1000.0	9.000	L1	19.8	13.0	46.0
0.600000	34.3	1000.0	9.000	N	19.7	11.7	46.0

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