FCC PART 15C
ISED RSS-247
TEST REPORT
No.I21Z70185-EMC09

for

Samsung Electronics Co., Ltd.

Notebook PC

XE310XDA

with

FCC ID: ZCAXE310XDA

ISED Number: 25314-XE310XDA

Hardware Version: REV1.0

Software Version: Chrome

Issued Date: 2021-06-21

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.

Test Laboratory:

CTTL, Telecommunication Technology Labs, CAICT

No.52, HuayuanNorth Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512,Fax:+86(0)10-62304633-2504

Email:cttl_terminals@caict.ac.cn, website: www.chinattl.com

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21Z70185-EMC09	Rev.0	1st edition	2021-06-21

CONTENTS

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

Location1: CTTL(huayuan North Road)

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

Location2: 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 data

Testing Start Date: 2021-05-06

Testing End Date: 2021-06-18

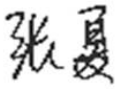
1.5. Signature

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.
Address:	19 Chapin Rd.,Building D Pine Brook, NJ 07058
Contact:	Jenni Chun
Email:	j1.chun@samsung.com
Telephone:	+1-201-937-4203
Fax:	/

2.2. Manufacturer Information

Company Name:	Samsung Electronics Co., Ltd.
Address:	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea
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	XE310XDA
FCC ID	ZCAXE310XDA
ISED Number	25314-XE310XDA

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	2170185UT31a	REV1.0	Chrome
EUT2	2170185UT11a	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 Bluetooth Low Engegy mode the EUT can transmit only at CHAIN A RF output.

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 parameters, referring to Annex A for detailed information, is supplied by the client 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: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz.	2019
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	June,2013
ISED RSS - Gen	Spectrum Management and Telecommunications – Radio Standards Specification	Issue 5 2019
ISED RSS-247	General Requirements for Compliance of Radio Apparatus Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	Issue 2 2017
KDB 558074 D01	Federal Communications Commission Office of Engineering and Technology Laboratory Division 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. Test Results

5.1. Summary of Test Results

Abbreviations used in this clause:

P Pass, The EUT complies with the essential requirements in the standard.

F Fail, The EUT does not comply with the essential requirements in the standard

NA Not Applicable, The test was not applicable

NP Not Performed, The test was not performed by CTTL

SUMMARY OF MEASUREMENT RESULTS	Sub-clause of Part15C	Sub-clause of ISED	Verdict
Radiated Spurious Emission	15.247, 15.205, 15.209	RSS-247 5.5 RSS-Gen 8.9	**P**
AC Power line Conducted Emission	15.107, 15.207	RSS-Gen 8.8	**P**

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

The measurement is made according to ANSI C63.10.

5.2. Statements

CTTL has evaluated the test cases requested by the applicant /manufacturer as listed in section 5.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.2

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	Analytical Spectrometer	FSV40	R&S	101047	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

Measurement Uncertainty:

Frequency Range	Uncertainty(dBm) (k=2)
9kHz-30MHz	/
30MHz ≤ f ≤ 1GHz	5.40
1GHz ≤ f ≤18GHz	4.32
18GHz ≤ f ≤40GHz	5.26

AC Power-line Conducted Emission

Measurement Uncertainty (k=2)	3.10dB

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

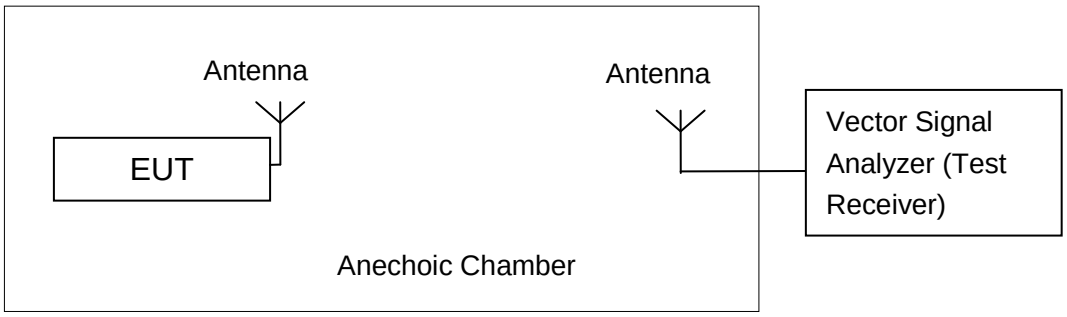
C.1. Radiated Spurious Emission

Specification Reference

FCC 47 CFR Part 15.247, 15.205, 15.209 & RSS-247 5.5, RSS-GEN, 8.9

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 & RSS-247 section 5.5	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(μV/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:

Result=P_{Mea}+$A_{Rpl=}$ P_{Mea}+Cable Loss+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.

C.1.1 Radiated Spurious Emission- above 1GHz

SPEED

Average Measurement results

GFSK 2402MHz

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)
2388.780	46.55	2.86	32.00	11.69	54.00	7.45	V
2389.920	46.55	2.87	32.00	11.69	54.00	7.45	V
4804.000	27.85	-33.27	34.12	26.99	54.00	26.15	V
7206.000	29.81	-31.17	35.78	25.19	54.00	24.19	H
9608.000	30.69	-30.55	36.65	24.58	54.00	23.31	V
12010.000	33.51	-28.93	38.71	23.73	54.00	20.49	V

GFSK 2440MHz

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)
2434.020	46.70	2.90	32.04	11.76	54.00	7.30	V
2446.680	46.68	2.91	32.05	11.73	54.00	7.32	V
4882.000	27.93	-33.32	34.15	27.09	54.00	26.07	H
7323.000	30.21	-30.91	35.83	25.28	54.00	23.79	V
9764.000	31.09	-30.33	36.87	24.56	54.00	22.91	V
12205.000	33.89	-28.02	38.82	23.08	54.00	20.11	V

GFSK 2480MHz

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	48.68	2.93	32.09	13.67	54.00	5.32	V
2483.580	48.44	2.93	32.09	13.42	54.00	5.56	V
4960.000	27.74	-33.60	34.18	27.15	54.00	26.26	H
7440.000	29.67	-31.69	35.88	25.49	54.00	24.33	V
9920.000	31.51	-30.00	37.09	24.42	54.00	22.49	V
12400.000	33.64	-28.10	38.94	22.80	54.00	20.36	V

Peak Measurement results

GFSK 2402MHz

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)
2387.252	59.80	2.86	32.00	24.94	74.00	14.20	V
2389.114	59.70	2.87	32.00	24.84	74.00	14.30	V
4804.000	38.42	-33.27	34.12	37.57	74.00	35.58	V
7206.000	42.67	-31.17	35.78	38.05	74.00	31.33	H
9608.000	41.35	-30.55	36.65	35.25	74.00	32.65	V
12010.000	44.34	-28.93	38.71	34.57	74.00	29.66	V

GFSK 2440MHz

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)
2359.000	45.02	-35.33	31.97	48.38	74.00	28.98	V
2506.000	44.51	-34.99	32.11	47.39	74.00	29.49	V
4882.000	38.57	-33.32	34.15	37.73	74.00	35.43	H
7323.000	41.96	-30.91	35.83	37.03	74.00	32.04	H
9764.000	41.93	-30.33	36.87	35.39	74.00	32.07	V
12205.000	45.73	-28.02	38.82	34.92	74.00	28.27	H

GFSK 2480MHz

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)
2483.675	60.24	2.93	32.09	25.22	74.00	13.76	V
2484.160	59.88	2.93	32.09	24.87	74.00	14.12	V
4960.000	38.24	-33.60	34.18	37.65	74.00	35.76	H
7440.000	40.41	-31.69	35.88	36.23	74.00	33.59	H
9920.000	42.77	-30.00	37.09	35.68	74.00	31.23	H
12400.000	45.07	-28.10	38.94	34.23	74.00	28.93	H

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

Conclusion: PASS

AWAN

Average Measurement results

GFSK 2402MHz

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)
2387.820	46.65	2.86	32.00	11.79	54.00	7.35	V
2389.980	46.69	2.87	32.00	11.82	54.00	7.31	V
4804.000	28.08	-33.27	34.12	27.23	54.00	25.92	V
7206.000	30.01	-31.17	35.78	25.39	54.00	23.99	H
9608.000	31.02	-30.55	36.65	24.92	54.00	22.98	V
12010.000	33.46	-28.93	38.71	23.68	54.00	20.54	H

GFSK 2440MHz

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)
2436.180	46.88	2.90	32.04	11.94	54.00	7.12	V
2443.980	47.04	2.90	32.05	12.09	54.00	6.96	V
4882.000	28.29	-33.32	34.15	27.45	54.00	25.71	H
7323.000	30.29	-30.91	35.83	25.37	54.00	23.71	H
9764.000	31.07	-30.33	36.87	24.53	54.00	22.93	V
12205.000	33.90	-28.02	38.82	23.10	54.00	20.10	H

GFSK 2480MHz

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	48.17	2.93	32.09	13.16	54.00	5.83	V
2483.700	47.69	2.93	32.09	12.68	54.00	6.31	V
4960.000	29.62	-33.60	34.18	29.04	54.00	24.38	V
7440.000	29.89	-31.69	35.88	25.70	54.00	24.11	H
9920.000	31.69	-30.00	37.09	24.59	54.00	22.31	H
12400.000	33.73	-28.10	38.94	22.88	54.00	20.27	H

Peak Measurement results

GFSK 2402MHz

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)
2351.790	60.20	2.84	31.96	25.40	74.00	13.80	V
2386.104	60.50	2.86	32.00	25.64	74.00	13.50	H
4804.000	40.78	-33.27	34.12	39.93	74.00	33.22	H
7206.000	42.42	-31.17	35.78	37.80	74.00	31.58	V
9608.000	43.34	-30.55	36.65	37.23	74.00	30.66	V
12010.000	46.18	-28.93	38.71	36.41	74.00	27.82	H

GFSK 2440MHz

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)
2350.600	43.43	-35.32	31.96	46.79	74.00	30.57	V
2532.680	44.33	-34.75	32.16	46.92	74.00	29.67	V
4882.000	41.16	-33.32	34.15	40.33	74.00	32.84	V
7323.000	42.90	-30.91	35.83	37.98	74.00	31.10	H
9764.000	43.82	-30.33	36.87	37.28	74.00	30.18	H
12205.000	47.37	-28.02	38.82	36.57	74.00	26.63	H

GFSK 2480MHz

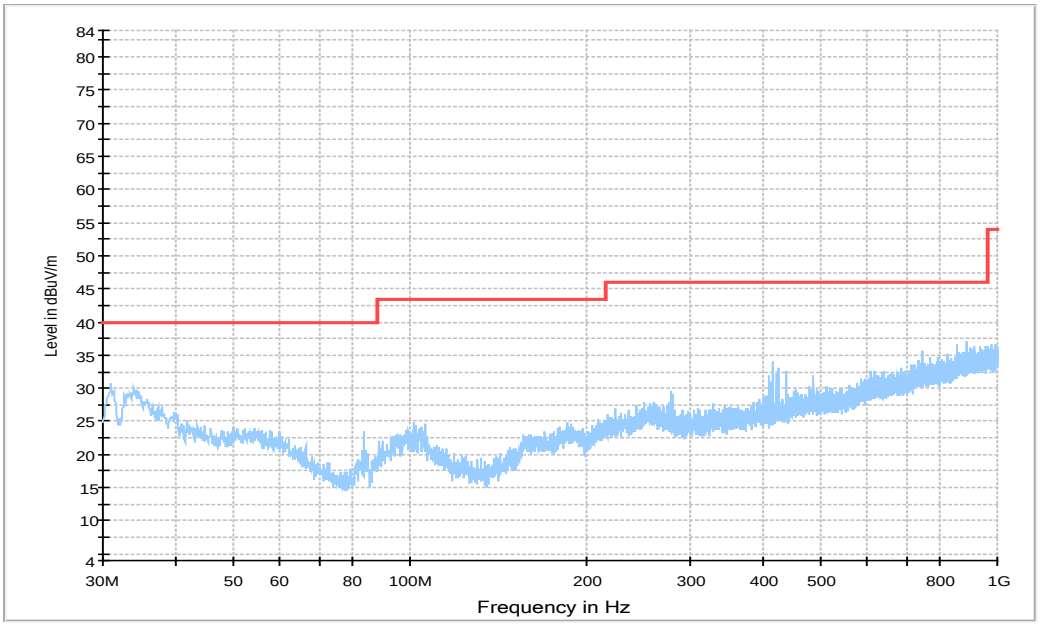
Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
2484.070	60.72	2.93	32.09	25.70	74.00	13.28	V
2485.855	60.28	2.93	32.09	25.26	74.00	13.72	V
4960.000	40.15	-33.60	34.18	39.56	74.00	33.85	V
7440.000	42.03	-31.69	35.88	37.85	74.00	31.97	H
9920.000	43.65	-30.00	37.09	36.56	74.00	30.35	H
12400.000	46.30	-28.10	38.94	35.46	74.00	27.70	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

There are no emissions found below 30MHz with in 20dB of the limit.

C.1.3 Band Edges Compliance– Radiated

SPEED:

Mode	Channel	Frequency Range	Test Results	Conclusion
GFSK	0	2.31GHz ~2.45GHz	Fig.1	P
	39	2.45GHz ~2.5GHz	Fig.2	P

AWAN

Mode	Channel	Frequency Range	Test Results	Conclusion
GFSK	0	2.31GHz ~2.45GHz	Fig.3	P
	39	2.45GHz ~2.5GHz	Fig.4	P

Conclusion: PASS

Test graphs as below

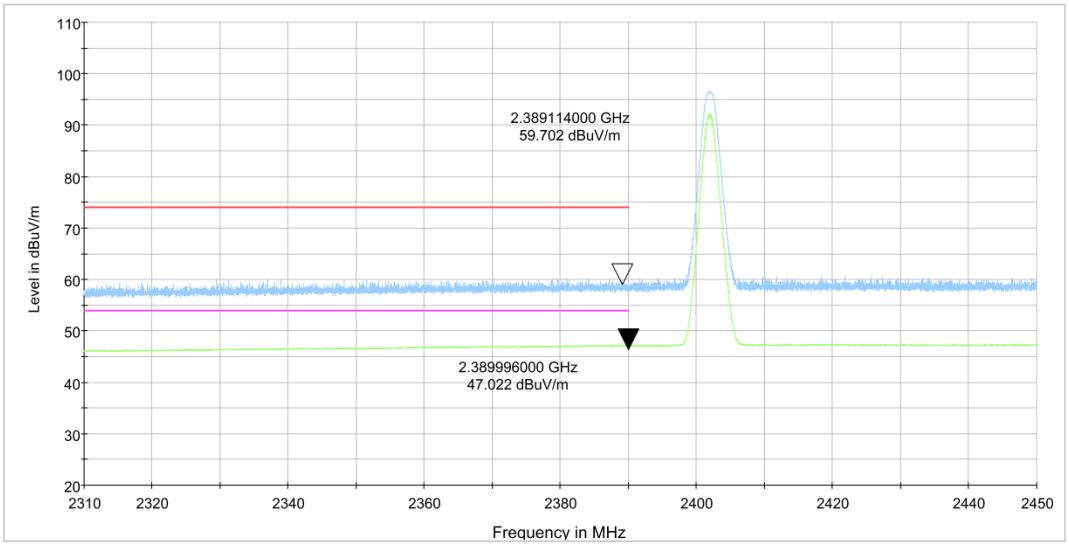


Fig.1. Frequency Band Edges: GFSK, 2402 MHz, 2.31 GHz – 2.45GHz

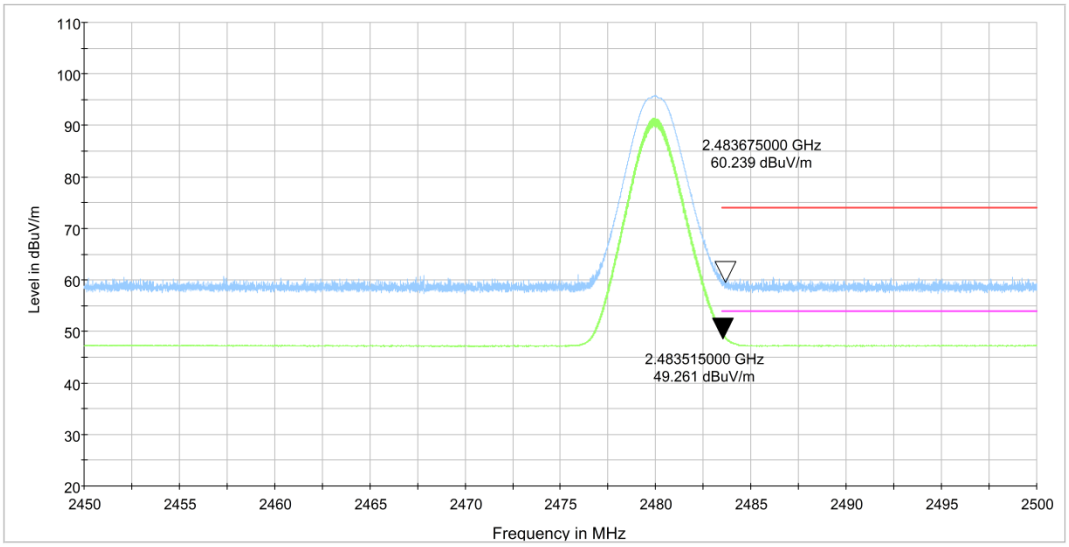


Fig.2. Frequency Band Edges: GFSK, 2480 MHz, 2.45 GHz - 2.50GHz

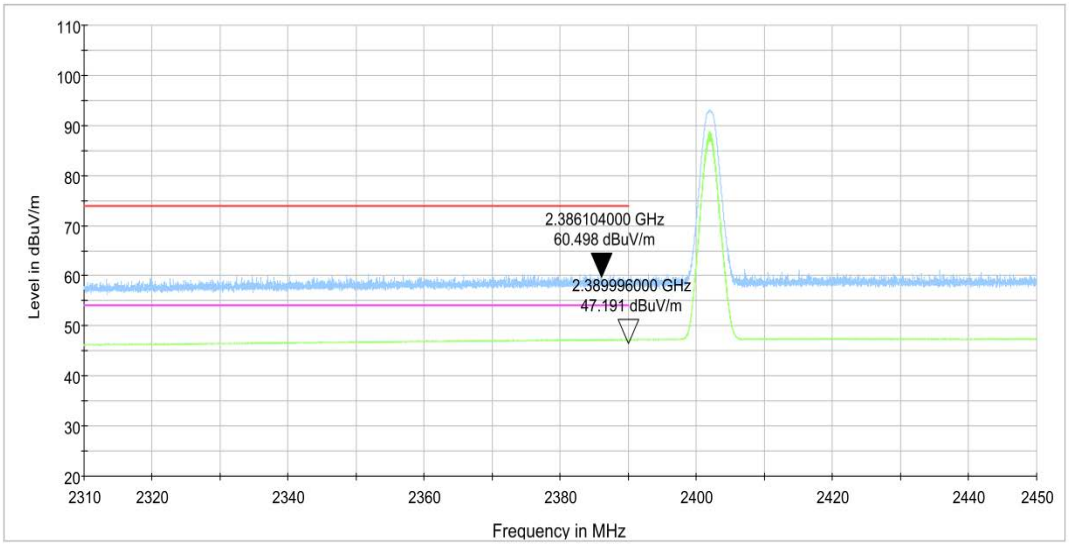


Fig.3. Frequency Band Edges: GFSK, 2402 MHz, 2.31 GHz – 2.45GHz

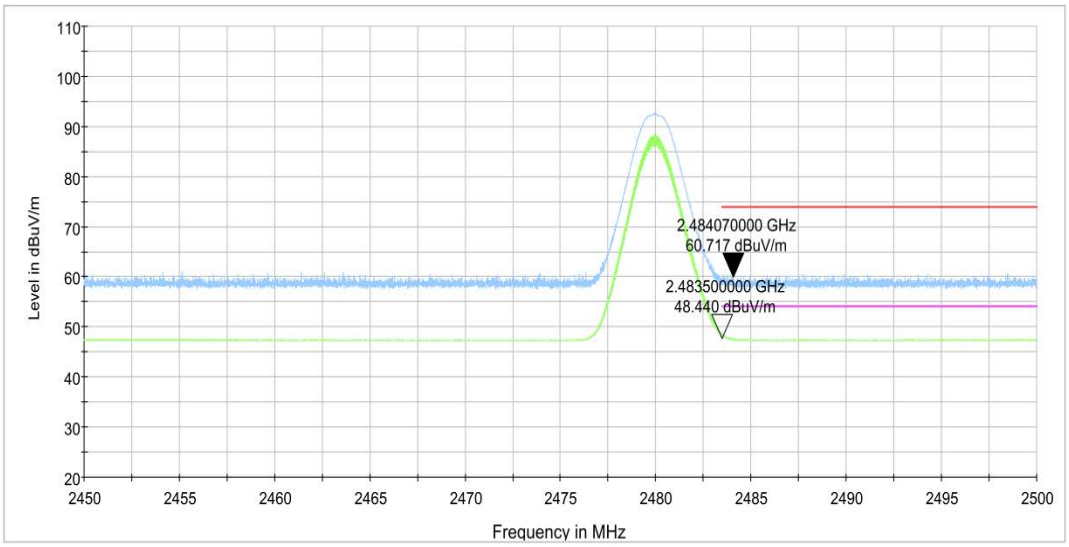


Fig.4. Frequency Band Edges: GFSK, 2480 MHz, 2.45 GHz - 2.50GHz

C.2. AC Power line Conducted Emission

Specification Reference

FCC 47 CFR Part 15.207, 15.107& RSS-GEN, 8.8

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.

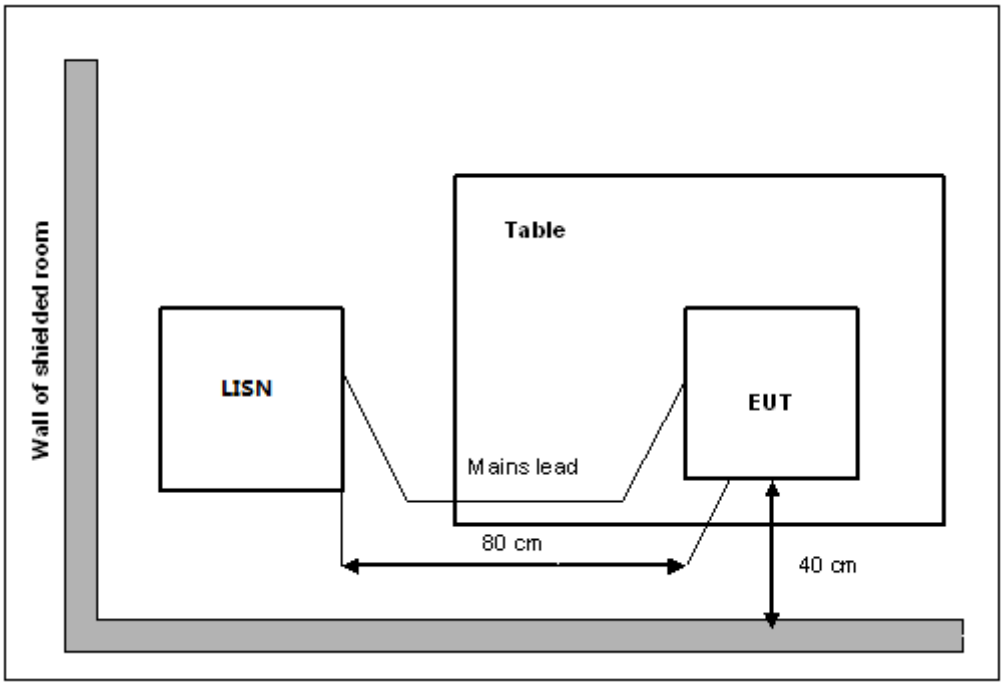
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/VBW
0.15-30	9kHz

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:

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		bluetooth	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.				

Bluetooth (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		bluetooth	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:

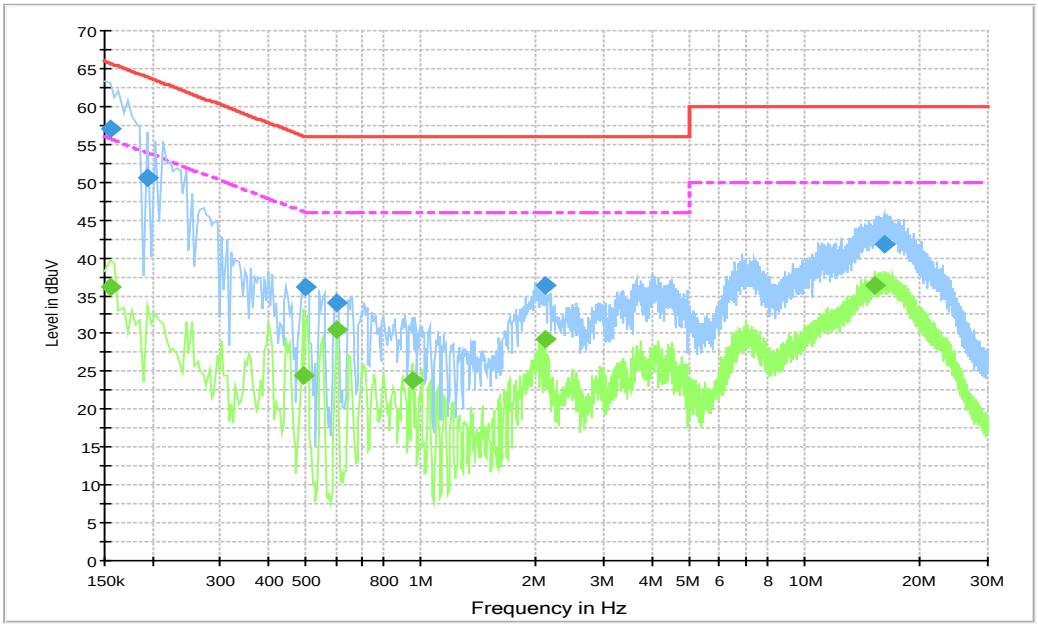


Fig.C.2.1 AC Power line Conducted Emission- bluetooth

Note: 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	57.1	1000.	9.000	N	19.6	8.6	65.8
0.195000	50.6	1000.	9.000	L1	19.6	13.2	63.8
0.501000	36.1	1000.	9.000	N	19.8	19.9	56.0
0.600000	34.1	1000.	9.000	L1	19.7	21.9	56.0
2.103000	36.4	1000.	9.000	L1	19.7	19.6	56.0
16.161000	41.7	1000.	9.000	L1	19.8	18.3	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.154500	36.2	1000.0	9.000	N	19.6	19.6	55.8
0.492000	24.5	1000.0	9.000	N	19.8	21.7	46.1
0.604500	30.5	1000.0	9.000	L1	19.7	15.5	46.0
0.946500	23.9	1000.0	9.000	L1	19.7	22.1	46.0
2.103000	29.2	1000.0	9.000	L1	19.7	16.8	46.0
15.288000	36.3	1000.0	9.000	L1	19.7	13.7	50.0

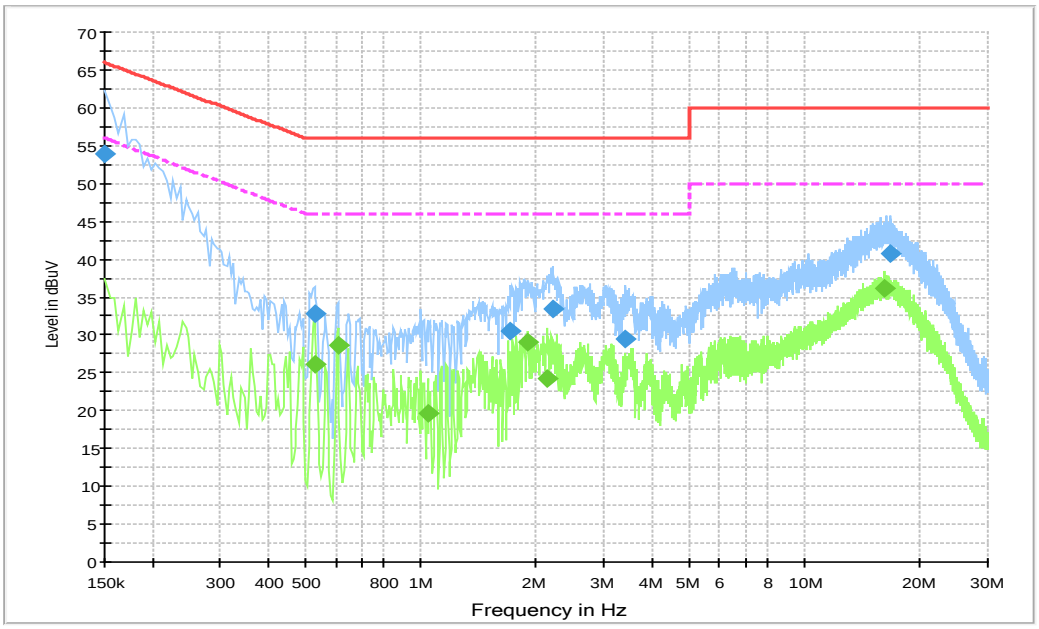


Fig.C.2.2 AC Power line Conducted Emission-Idle

Note: 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	54.0	1000.	9.000	N	19.6	12.0	66.0
0.528000	32.9	1000.	9.000	N	19.8	23.1	56.0
1.716000	30.5	1000.	9.000	L1	19.7	25.5	56.0
2.197500	33.5	1000.	9.000	L1	19.6	22.5	56.0
3.394500	29.4	1000.	9.000	L1	19.7	26.6	56.0
16.764000	40.7	1000.	9.000	L1	19.8	19.3	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.528000	26.2	1000.0	9.000	N	19.8	19.8	46.0
0.609000	28.7	1000.0	9.000	L1	19.7	17.3	46.0
1.041000	19.7	1000.0	9.000	L1	19.6	26.3	46.0
1.896000	29.0	1000.0	9.000	L1	19.7	17.0	46.0
2.130000	24.3	1000.0	9.000	L1	19.7	21.7	46.0
16.138500	36.2	1000.0	9.000	L1	19.8	13.8	50.0

*****END OF REPORT*****