TEST REPORT

REPORT NUMBER: 25B02W000005-009

ON

Type of Equipment:	Barcode Reader
Type of Designation:	DLMKWF
Brand Name:	DATALOGIC
Manufacturer:	Datalogic S.r.l.
FCC ID:	U4G-DLMKWF
IC	3862E-DLMKWF

ACCORDING TO

FCC Part 2, FCC Part 15C, RSS-Gen Issue 5, RSS-247 Issue 3,ANSI C63.10-2013

Chongqing Academy of Information and Communications Technology

Month date, year
Apr.18th, 2025
Signature

Zhou Jin
Director

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 Chongqing Academy of Information and Communications Technology.

Revision Version

Report Number	Revision	Date
25B02W000005-009	00	2025-04-18

CONTENTS

1. Test Laboratory 5
1.1. Testing Location 5
1.2. Testing Environment 5
1.3. Project data 5
1.4. Signature 5
2. Client Information 6
2.1. Applicant Information 6
2.2. Manufacturer Information 6
3. Equipment under Test (EUT) and Ancillary Equipment (AE) 7
3.1. About EUT 7
3.2. Internal Identification of EUT used during the test 7
3.3. Outline of Equipment under Test 7
3.4. Internal Identification of AE used during the test 8
3.5. EUT Test RF Configuration 8
4. Reference Documents 9
4.1. Documents supplied by applicant 9
4.2. Reference Documents for testing 9
5. Test Equipments Utilized 10
5.1. RF Test System 10
5.2. RSE and CE Test System 10
5.3. Climate Chamber 11
5.4. Anechoic chamber Vibration table 11
5.5. Test software 11
6. Test Results 12
6.1. Summary of Test Results 12

6.2. Duty cycle 13

6.3. Output Power-Conducted 16

6.4. Peak Power Spectral Density 20

6.5. 6dB Occupied Bandwidth 24

6.6. 99% Occupied Bandwidth 28

6.7. Band Edges Compliance 32

6.8. Transmitter Spurious Emission-conducted 35

6.9. Transmitter Spurious Emission-Radiated 43

6.10. AC Powerline Conducted Emission 62

ANNEX A EUT Photos 65

ANNEX B Deviations from Prescribed Test Methods 66

1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
Designation Number:	CN1239
IC Registration Number:	29397
Address:	No.19 EastRoad,Xiantao Big-data Valley,Yubei District,Chongqing,People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	30-75%

1.3. Project data

Testing Start Date:	2025-03-25
Testing End Date:	2025-04-14

1.4. Signature

李润豪	**2025-04-18**
Li Runhao **(Prepared this test report)**	**Date**
	2025-04-18
Wang Lili **(Reviewed this test report)**	**Date**
	2025-04-18
Zhou Jin **Director of the laboratory** **(Approved this test report)**	**Date**

2. Client Information

2.1. Applicant Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-ltaly
City:	Calderara di Reno
Country:	ltaly
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

2.2. Manufacturer Information

Company Name:	Datalogic S.r.l.
Address /Post:	Via San Vitalino no.13, Calderara di Reno -40012(BO)-ltaly
City:	Calderara di Reno
Country:	ltaly
Telephone:	+39 051 3147 393
Fax:	N/A
Email:	Ruggero.Cacioppo@datalogic.com
Contact Person:	Ruggero Cacioppo

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	Barcode Reader
Model name	DLMKWF
Brand name	DATALOGIC
WLAN Frequency Band	Wi-Fi 2.4G:802.11b/g/n
Type of WIFI 2.4G modulation	802.11b: DSSS, 802.11g/n: OFDM
HVIN	DLMKWF
Extreme Temperature	-20/+50°C
Nominal Test Voltage	3.85V
Extreme Test High Voltage	4.4V
Extreme Test Low Voltage	3.6V

Note1: Photographs of EUT are shown in ANNEX A of this test report.
Note2: High and low voltage values in extreme condition test are given by manufacturer.
Note3: The Extreme Temperature is provided by the manufacturer and has not been verified by the laboratory.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
25B02W000005#S07	S25CC0873	V00	0.00.01.20250311	2025-03-20
25B02W000005#S16	867529060024650	V00	0.00.01.20250311	2025-03-27

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

No.	Item(s)	Data
1	Antenna gain of EUT	1.13 dBi
Note: The data of aantenna gain is provided by the Antenna specification may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.		

3.3. Outline of Equipment under Test

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)	Channel Separation
WLAN	2.4G	2412MHz-2462MHz		5MHz

Test frequency list:

2.4G

BW_20M	Channel	1	6	11
	Freq. (MHz)	2412	2437	2462

Emissions Information:

TestMode	Frequency Min(MHz)	Frequency Max(MHz)	Max OutPut Power (dBm)	Max OutPut Power (W)	OBW (KHz)	Necessary Bandwidth & Emission Classification
11B	2412	2462	20.02	0.1005	12800	12M8G1D
11G	2412	2462	19.15	0.0822	17320	17M3D1D
11N20	2412	2462	18.95	0.0785	18280	18M3D1D

Note: This report is for 2.4G WLAN only.

3.4. Internal Identification of AE used during the test

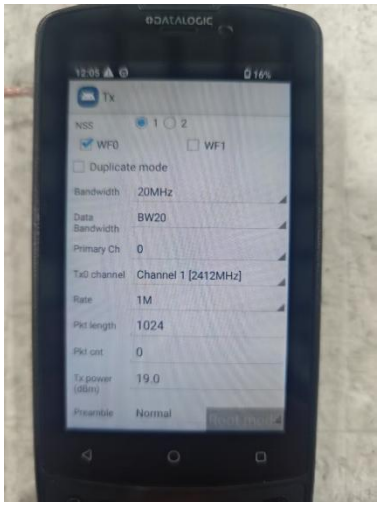
AE ID*	Description	Note
BA01	Battery	Model: MK2-BY-202 3.85V 4850mAh
AE1	RF cable	1.0dB

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

dB*: is provided customer.

3.5. EUT Test RF Configuration

EUT uses engineering mode to control RF emissions, changing power levels, channels, rates, and HT.



4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B 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 Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	--
FCC Part 15C	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, 2400-2483.5MHz, and 5725-5850MHz	--
RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus	2021
RSS-247 Issue 3	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	2023
ANSI C63.10	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	2013
KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for Performing Compliance Measurements on Frequency Hopping Spread Spectrum systems (DSS) Operating Under §15.247	--
Note: FCC Part 2 and KDB 558074 D01 15.247 Meas Guidance v05r02 is not A2LA certified.		

5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137	--	--	R&S	1 Year	2025-06-28
2	T-SWT01 RF switch unit	--	--	--	--	Beijing Zhiwang Xince Technology Co., Ltd	--	--

5.2. RSE and CE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal. Interval	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	1 Year	2025-06-28
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2 Years	2026-10-28
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2 Years	2026-11-08
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2 Years	2026-09-30
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2 Years	2026-09-30
6	Loop Antenna	6502	00213256	--	--	ETS	1 Year	2026-09-04
7	Amplifier1	SCU-08F1	8320027	--	--	R&S	--	--
8	Amplifier2	SCU-18F	180093	--	--	R&S	--	--
9	2-Line V-Network	ENV216	102368	--	--	R&S	1 Year	2025-05-16
10	Test Receiver	ESR 3	101382	03	3.48 SP2	R&S	1 Year	2025-06-28
11	Test Receiver	ESW 26	101382	00	1.50 SP1	R&S	1 Year	2025-06-28

5.3. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
--	--	--	--	--	--	--

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal. Interval	Cal.Due Date
1	Fully-Anechoic Chamber	FAC5	--	TDK	3 Years	2027-11-04
2	Anechoic Chamber	SAC 10	--	TDK	3 Years	2027-11-05

5.5. Test software

No.	Name	version	SN	Manufacture
1	EMC32 (Transmitter Spurious Emission-Radiated Above 1GHz)	V9.26.01	--	R&S
2	EMC32 (Transmitter Spurious Emission-Radiated Below 1GHz)	V 10.20.01	--	R&S
3	EMC32 (AC Powerline Conducted Emission)	V 10.40.10	--	R&S
4	WIFI/BT CE/FCC/ICautomated testing software	V1.0.0.0	--	Beijing Zhiwang Xince Technology Co., Ltd

6. Test Results

6.1. Summary of Test Results

A brief summary of the tests carried out is shown as following

FCC Rules	IC Rules	Name of Test	Result
15.247(b)	RSS-247 5.4	Duty cycle	N/A[note3]
15.247(b)	RSS-247 5.4	Maximum Peak Output Power	Pass
15.247(e)	RSS-247 5.2	Peak Power Spectral Density	Pass
15.247(a)	RSS-247 5.2	6dB Occupied Bandwidth	Pass
2.1049	RSS-GEN 6.7	99% Occupied Bandwidth	N/A[note3]
15.247(d)	RSS-247 5.5	Band Edges Compliance	Pass
15.247(d)	RSS-247 5.5	Transmitter Spurious Emission-Conducted	Pass
15.247/15.205/15.209	RSS-GEN 8.9, 8.10	Transmitter Spurious Emission-Radiated	Pass
15.207	RSS-GEN 8.8	AC Powerline Conducted Emission	Pass
15.203/15.247(c)	RSS Gen 6.8, RSS-247 5.4	Antenna requirement	Pass [Note 2]

NOTE 1：The mobile computer, manufactured by Datalogic S.r.l. is a new product for testing.
NOTE 2：2.4G WLAN used an Internal antenna with max Gain 1.13 dBi that complied with 15.203/15.247(c) Requirements.
NOTE 3：Unrestricted requirements.

6.2. Duty cycle

Specifications:	FCC 47 Part 15.247(b), RSS-247 5.4
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Measurement Uncertainty:

Measurement Uncertainty	--

Test Procedures:

This measurement is according to ANSI C63.10 clause 11.6

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

a) A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.

b) The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

1) Set the center frequency of the instrument to the center frequency of the transmission.

2) Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.

3) Set VBW ≥ RBW. Set detector = peak or average.

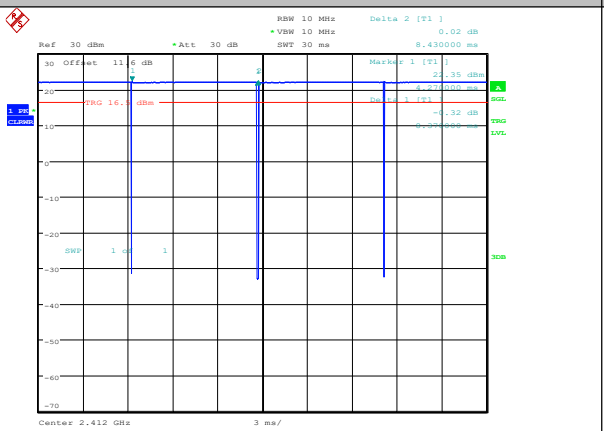
4) The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if T ≤ 16.7 μs.)

Measurement Results:

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.37	8.43	99.29	0.03
11B	Ant1	2437	8.37	8.43	99.29	0.03
11B	Ant1	2462	60.00	60.00	100.00	0.00
11G	Ant1	2412	1.38	1.44	95.83	0.18
11G	Ant1	2437	1.38	1.44	95.83	0.18
11G	Ant1	2462	1.37	1.44	95.14	0.22
11N20SISO	Ant1	2412	2.63	2.70	97.41	0.11
11N20SISO	Ant1	2437	2.63	2.70	97.41	0.11
11N20SISO	Ant1	2462	2.62	2.70	97.04	0.13

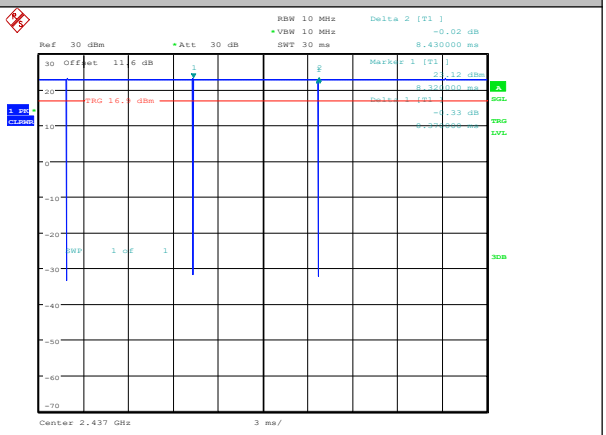
Test Graphs

NTNV-11B-Ant1-2412



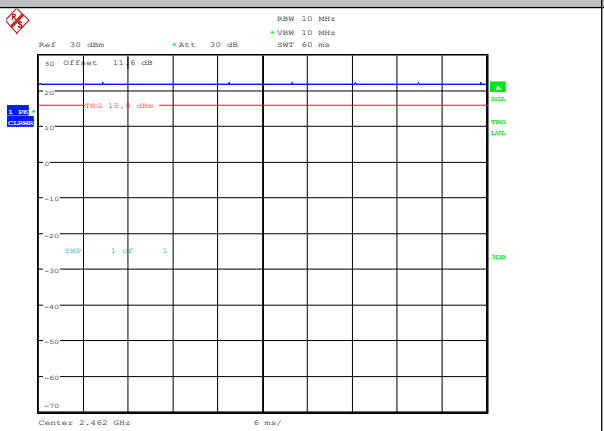
Date: 27.MAR.2025 15:03:32

NTNV-11B-Ant1-2437



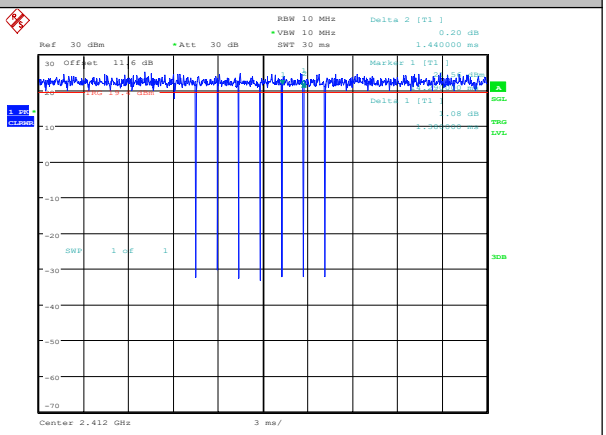
Date: 27.MAR.2025 15:10:18

NTNV-11B-Ant1-2462



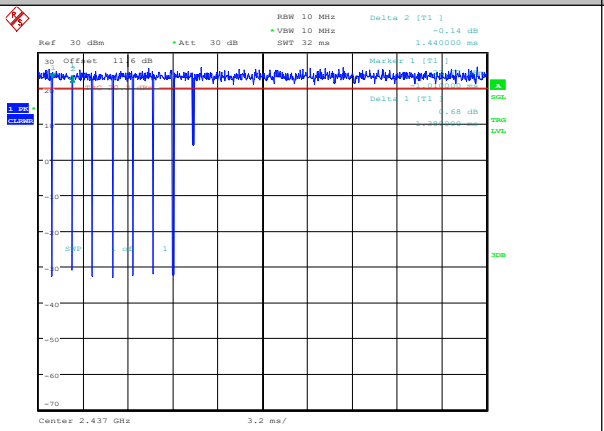
Date: 27.MAR.2025 15:20:08

NTNV-11G-Ant1-2412



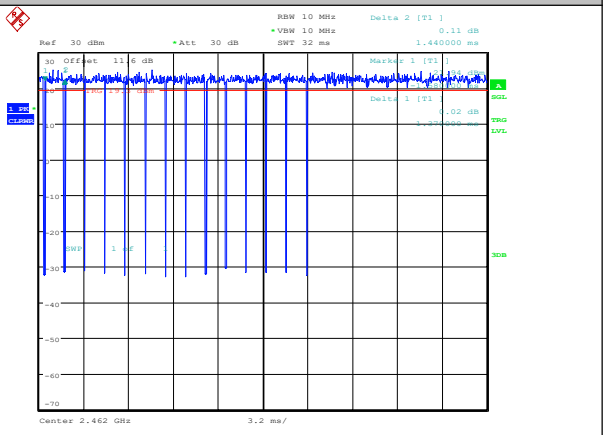
Date: 27.MAR.2025 15:33:24

NTNV-11G-Ant1-2437

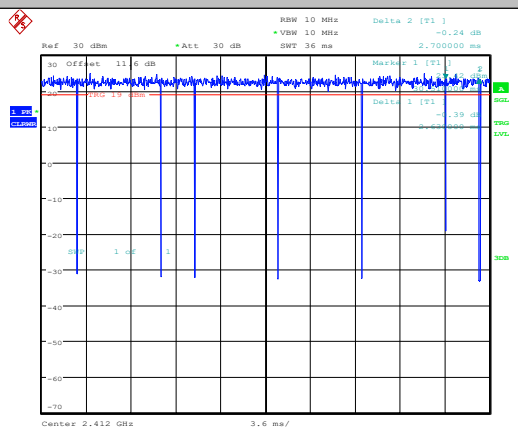
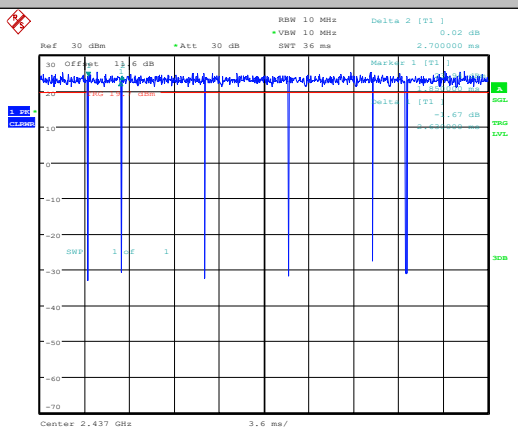
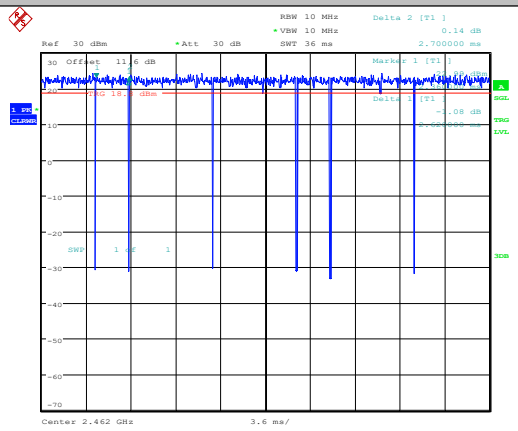


Date: 27.MAR.2025 16:01:06

NTNV-11G-Ant1-2462



Date: 27.MAR.2025 16:29:57

NTNV-11N20SISO-Ant1-2412	NTNV-11N20SISO-Ant1-2437
	
NTNV-11N20SISO-Ant1-2462	/
	/

6.3. Output Power-Conducted

Specifications:	FCC 47 Part 15.247(b), RSS-247 5.4
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Conducted Limit(dBm)	EIRP Limit(dBm)
FCC 47 Part 15.247(b)(3)	<30	N/A
RSS-247 5.4(d)	<30	<36
Note: Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.		

Measurement Uncertainty:

Measurement Uncertainty	0.42dB

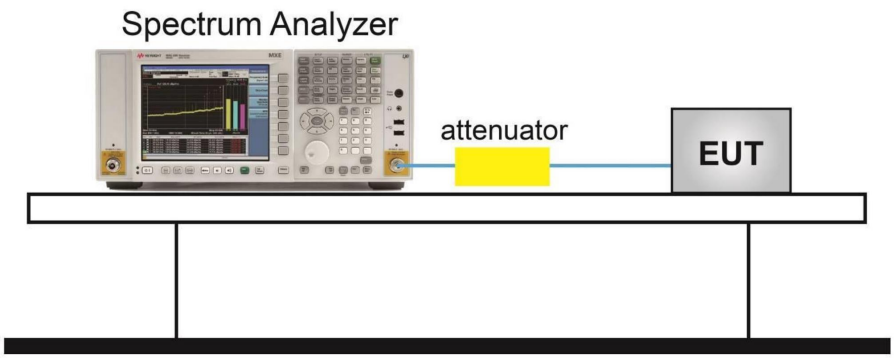
Test Procedures:

The measurement is according to ANSI C63.10 clause 11.9.

1. Measure the duty cycle D of the transmitter output signal as described in 11.6.
2. Set span to at least 1.5 times the OBW.
3. Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
4. Set VBW ≥ [3 × RBW].
5. Number of points in sweep ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = RMS (i.e., power averaging), if available. Otherwise, use the sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter.
10. Compute power by integrating the spectrum across the OBW of the signal using the instrument’s band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

11. Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.

Test setup:



Measurement Results:

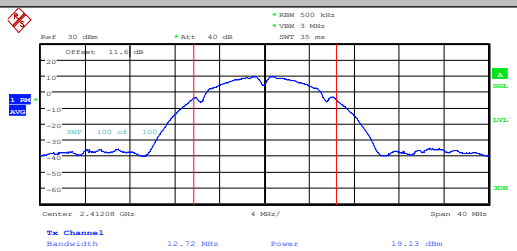
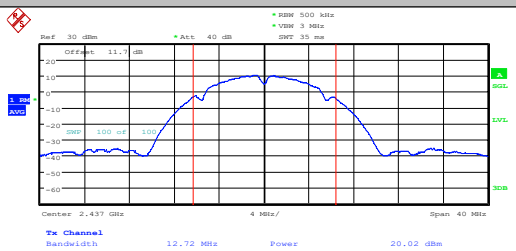
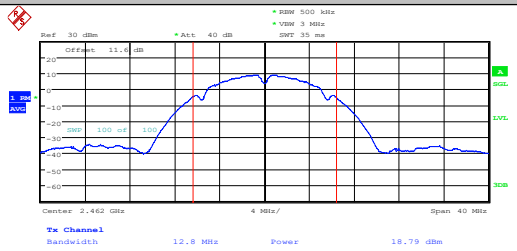
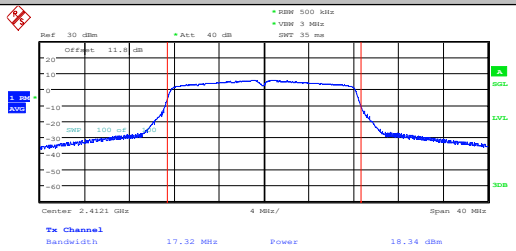
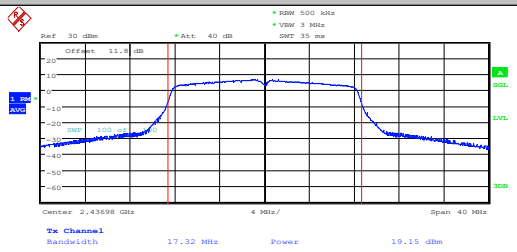
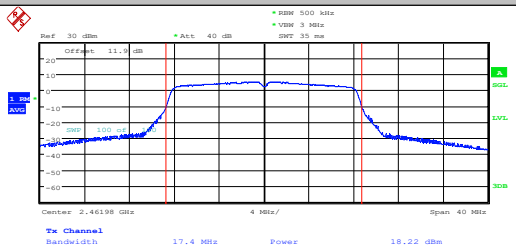
TestMode	Antenna	Frequency[MHz]	Set Power	Power[dBm]	Conducted Limit[dBm]	EIRP [dBm]	EIRP Limit[dBm]	Verdict
11B	Ant1	2412	19.5	19.13	≤30.00	20.26	≤36.00	PASS
11B	Ant1	2437	19.5	20.02	≤30.00	21.15	≤36.00	PASS
11B	Ant1	2462	19.5	18.79	≤30.00	19.92	≤36.00	PASS
11G	Ant1	2412	18.5	18.34	≤30.00	19.47	≤36.00	PASS
11G	Ant1	2437	18.5	19.15	≤30.00	20.28	≤36.00	PASS
11G	Ant1	2462	18.5	18.22	≤30.00	19.35	≤36.00	PASS
11N20SISO	Ant1	2412	18.5	18.17	≤30.00	19.30	≤36.00	PASS
11N20SISO	Ant1	2437	18.5	18.95	≤30.00	20.08	≤36.00	PASS
11N20SISO	Ant1	2462	18.5	18.05	≤30.00	19.18	≤36.00	PASS

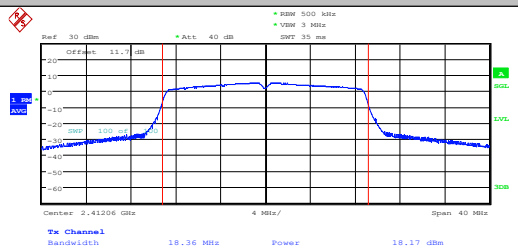
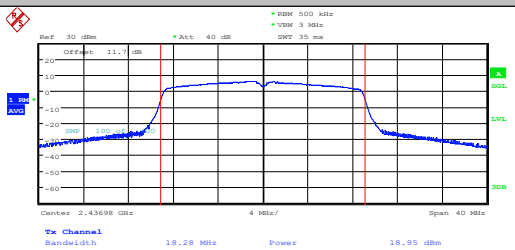
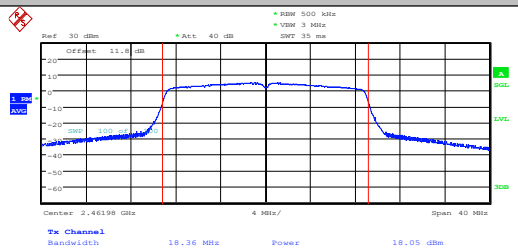
Note：

1.The Duty Cycle Factor is compensated in the graph.

2. In the graph, the Center frequency = (Low frequency of 99% OBW + High frequency of 99% OBW) /2.

Test Graphs:

11B-Ant1-2412-PASS	11B-Ant1-2437-PASS
 Date: 27.MAR.2025 15:03:53	 Date: 27.MAR.2025 15:10:38
11B-Ant1-2462-PASS	**11G-Ant1-2412-PASS**
 Date: 27.MAR.2025 15:20:50	 Date: 27.MAR.2025 15:34:06
11G-Ant1-2437-PASS	**11G-Ant1-2462-PASS**
 Date: 27.MAR.2025 16:01:46	 Date: 27.MAR.2025 16:30:41

11N20SISO-Ant1-2412-PASS	11N20SISO-Ant1-2437-PASS
 Date: 27.MAR.2025 16:47:44	 Date: 27.MAR.2025 17:11:03
11N20SISO-Ant1-2462-PASS	**/**
 Date: 27.MAR.2025 17:26:44	/

6.4. Peak Power Spectral Density

Specifications:	FCC 47 Part 15.247(e), RSS-247 5.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247(e)	≤ 8dBm/3 kHz
RSS-247 5.2(b)	≤ 8dBm/3 kHz
Note: This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.	

Measurement Uncertainty:

Measurement Uncertainty	0.46dB

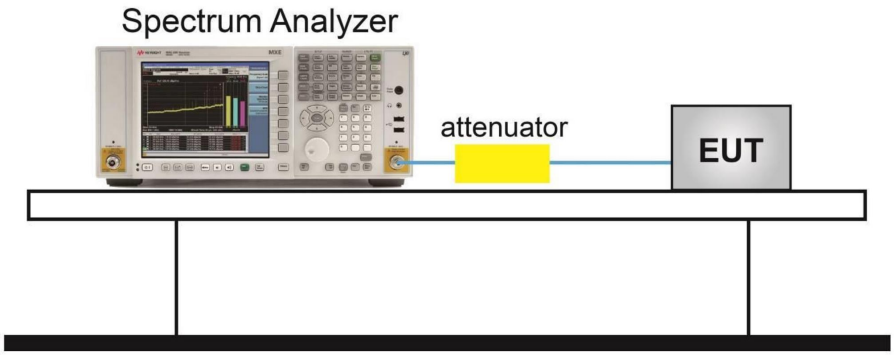
Test procedures:

The measurement is according to ANSI C63.10 clause 11.10.

The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement. Enable EUT transmitter maximum power continuously.

1. Measure the duty cycle (D) of the transmitter output signal as described in 11.6.
2. Set instrument center frequency to DTS channel center frequency.
3. Set span to at least 1.5 times the OBW.
4. Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
5. Set VBW ≥ [3 × RBW].
6. Detector = power averaging (rms) or sample detector (when rms not available).
7. Ensure that the number of measurement points in the sweep ≥ [2 × span / RBW].
8. Sweep time = auto couple.
9. Do not use sweep triggering; allow sweep to “free run.”
10. Employ trace averaging (rms) mode over a minimum of 100 traces.
11. Use the peak marker function to determine the maximum amplitude level.
12. Add [10 log (1 / D)], where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time.
13. If measured value exceeds requirement specified by regulatory agency, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

Test setup:



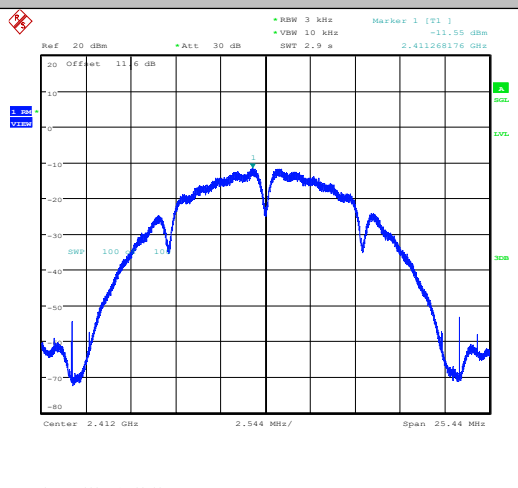
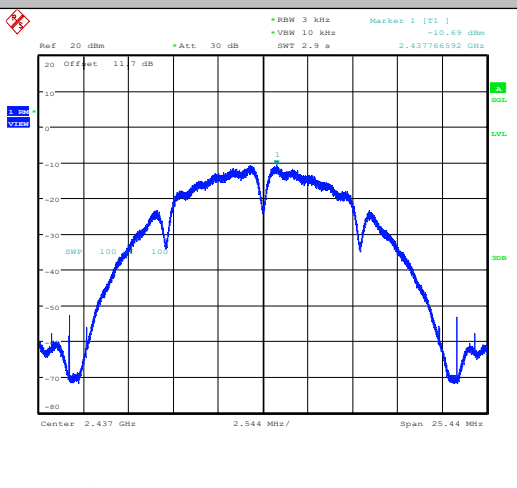
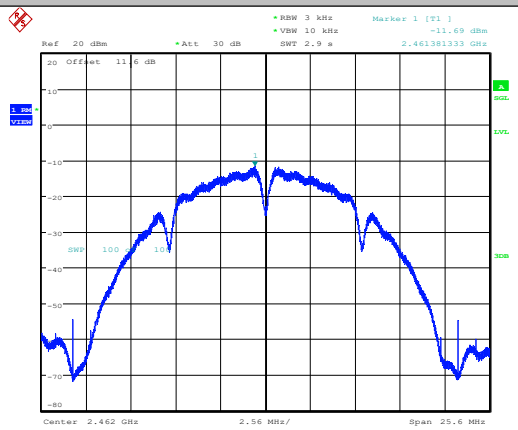
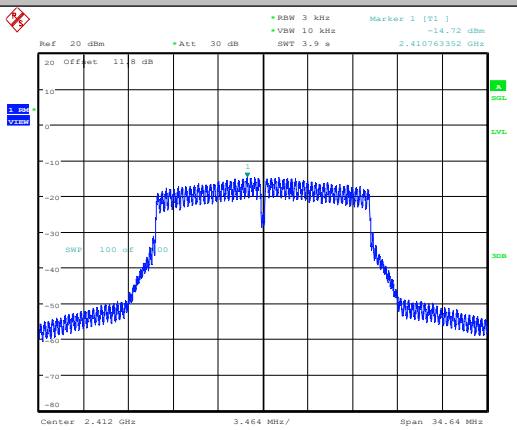
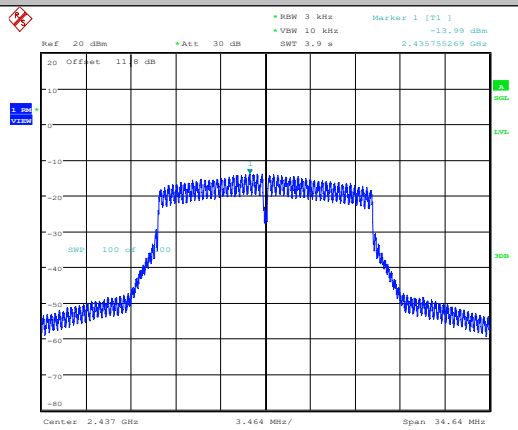
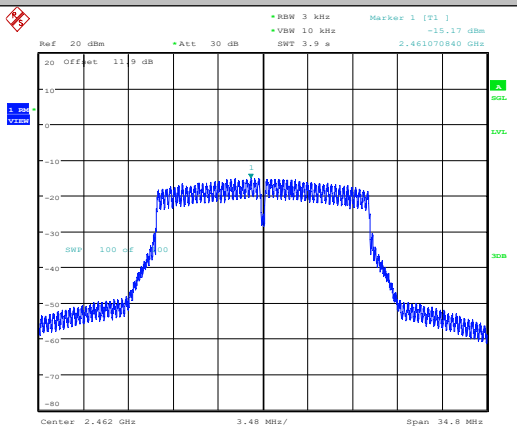
Measurement Results:

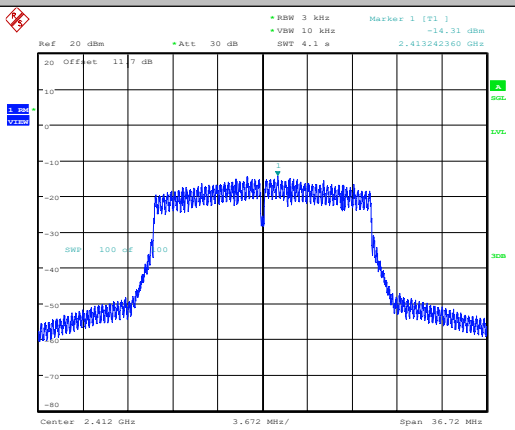
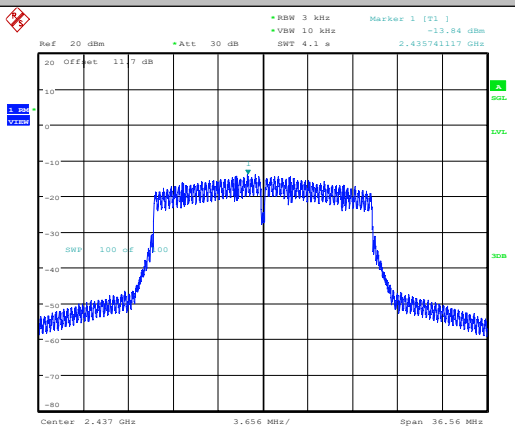
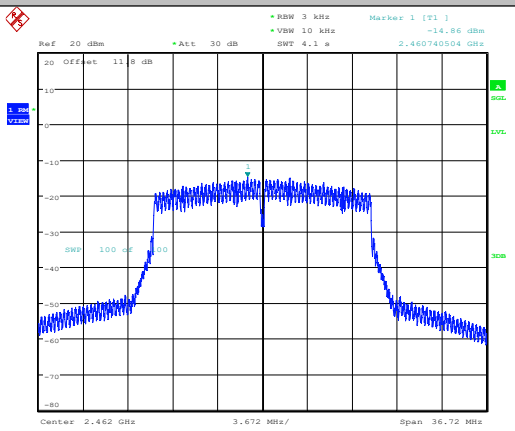
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-11.55	≤8.00	PASS
11B	Ant1	2437	-10.69	≤8.00	PASS
11B	Ant1	2462	-11.69	≤8.00	PASS
11G	Ant1	2412	-14.72	≤8.00	PASS
11G	Ant1	2437	-13.99	≤8.00	PASS
11G	Ant1	2462	-15.17	≤8.00	PASS
11N20SISO	Ant1	2412	-14.31	≤8.00	PASS
11N20SISO	Ant1	2437	-13.84	≤8.00	PASS
11N20SISO	Ant1	2462	-14.86	≤8.00	PASS

Note：

1.The Duty Cycle Factor is compensated in the graph.

Test Graphs

11B-Ant1-2412-PASS	11B-Ant1-2437-PASS
	
Date: 27.MAR.2025 15:09:20	Date: 27.MAR.2025 15:16:07
11B-Ant1-2462-PASS	**11G-Ant1-2412-PASS**
	
Date: 27.MAR.2025 15:26:19	Date: 27.MAR.2025 15:41:20
11G-Ant1-2437-PASS	**11G-Ant1-2462-PASS**
	
Date: 27.MAR.2025 16:09:06	Date: 27.MAR.2025 16:38:12

11N20SISO-Ant1-2412-PASS	11N20SISO-Ant1-2437-PASS
	
11N20SISO-Ant1-2462-PASS	**/**
	/

6.5. 6dB Occupied Bandwidth

Specifications:	FCC 47 Part 15.247(a) (2), RSS-247 5.2
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247(a) (2)	≥500kHz
RSS-247 5.2(a)	≥500kHz

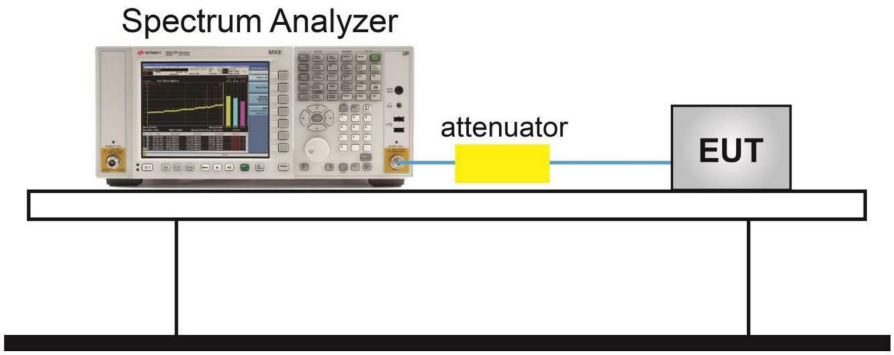
Measurement Uncertainty:

Measurement Uncertainty	17.8kHz

Test procedures

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW = 100 kHz.
4. Set the VBW ≥ [3 × RBW].
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

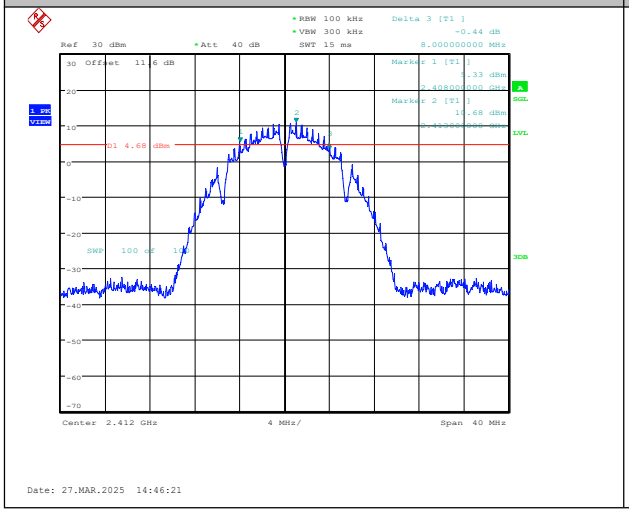
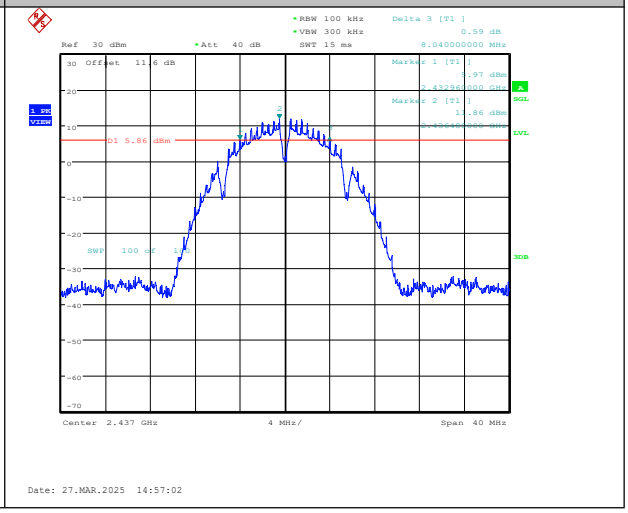
Test Setup:



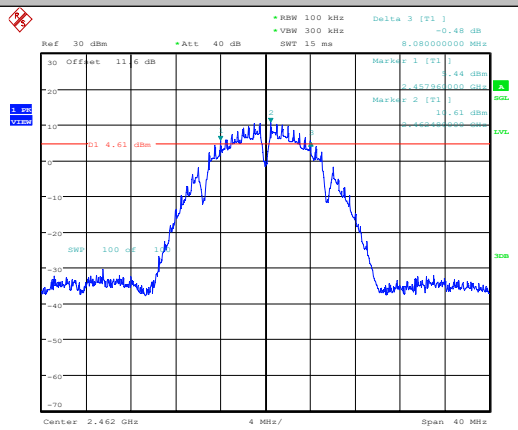
Measurement Results:

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.00	2408.00	2416.00	0.5	PASS
11B	Ant1	2437	8.04	2432.96	2441.00	0.5	PASS
11B	Ant1	2462	8.08	2457.96	2466.04	0.5	PASS
11G	Ant1	2412	15.28	2404.48	2419.76	0.5	PASS
11G	Ant1	2437	15.04	2429.44	2444.48	0.5	PASS
11G	Ant1	2462	15.08	2454.44	2469.52	0.5	PASS
11N20SISO	Ant1	2412	15.08	2404.44	2419.52	0.5	PASS
11N20SISO	Ant1	2437	15.08	2429.48	2444.56	0.5	PASS
11N20SISO	Ant1	2462	14.96	2454.52	2469.48	0.5	PASS

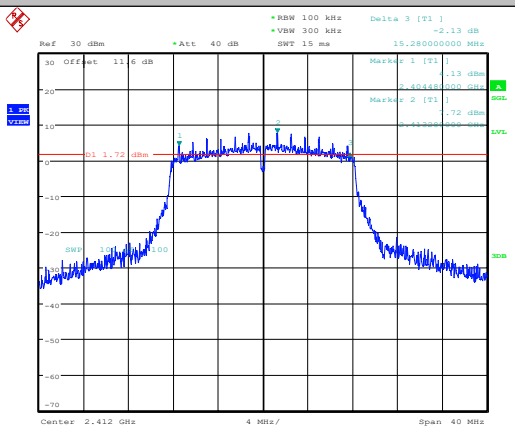
Test graphs

11B-Ant1-2412-PASS	11B-Ant1-2437-PASS
	

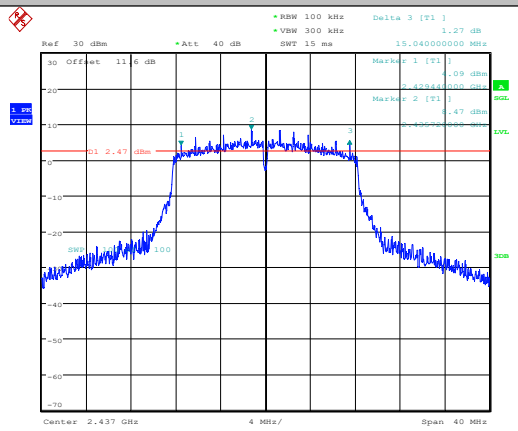
11B-Ant1-2462-PASS



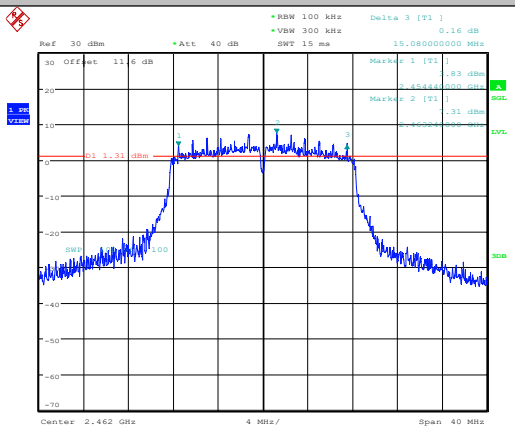
11G-Ant1-2412-PASS



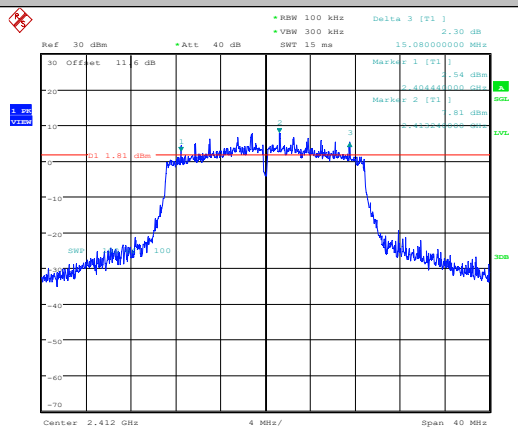
11G-Ant1-2437-PASS



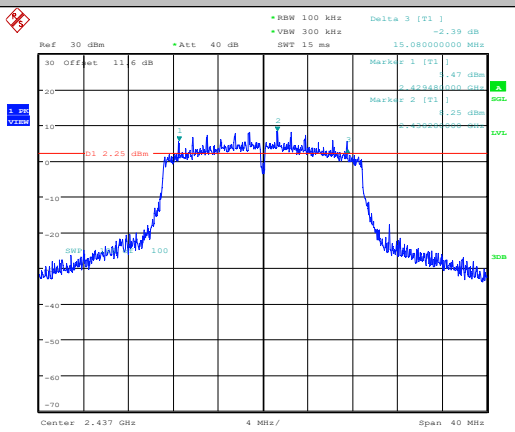
11G-Ant1-2462-PASS

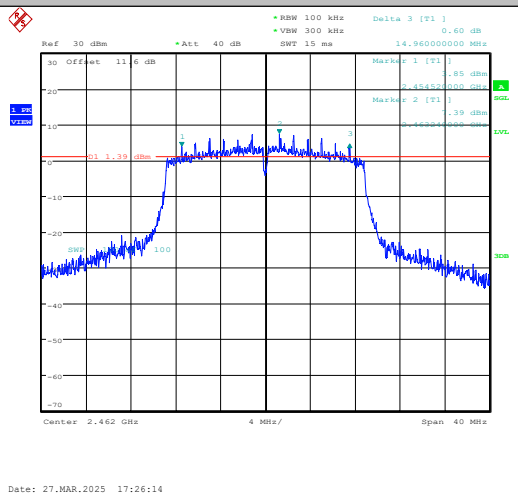


11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2437-PASS



11N20SISO-Ant1-2462-PASS	/
	/

6.6. 99% Occupied Bandwidth

Specifications:	FCC 47 Part 2.1049 , RSS-GEN 6.7
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	--

Limit Level Construction:

Standard	Limit
FCC 47 Part 2.1049	N/A
RSS-Gen 6.7	N/A

Measurement Uncertainty:

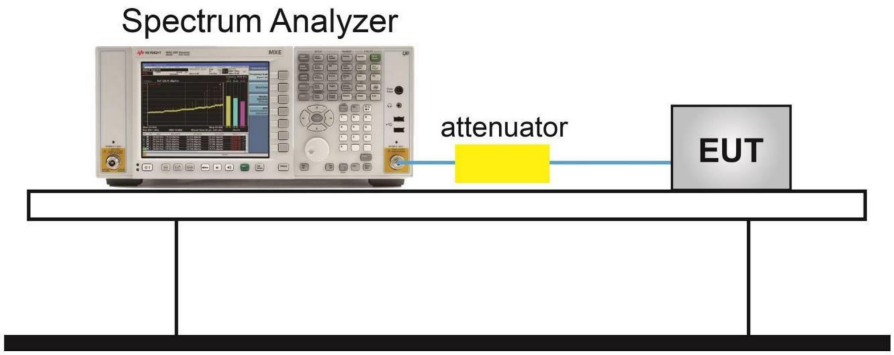
Measurement Uncertainty	17.8kHz

Test procedures:

The measurement is according to ANSI C63.10 clause 6.9.3.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW shall be in the range of 1% to 5% of the OBW.
4. Set the VBW ≥ [3 × RBW].
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

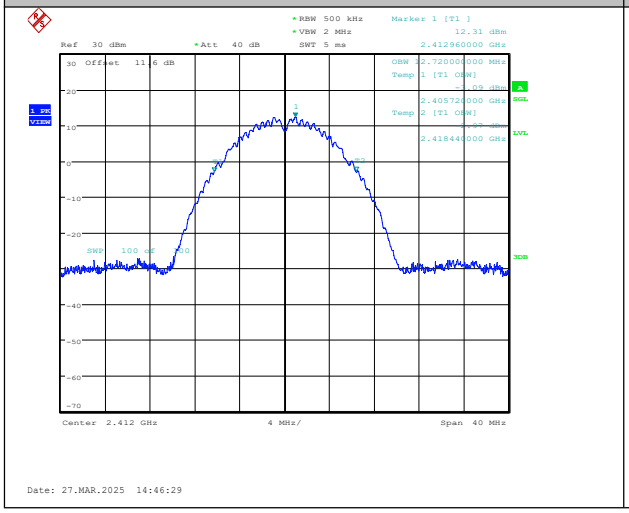
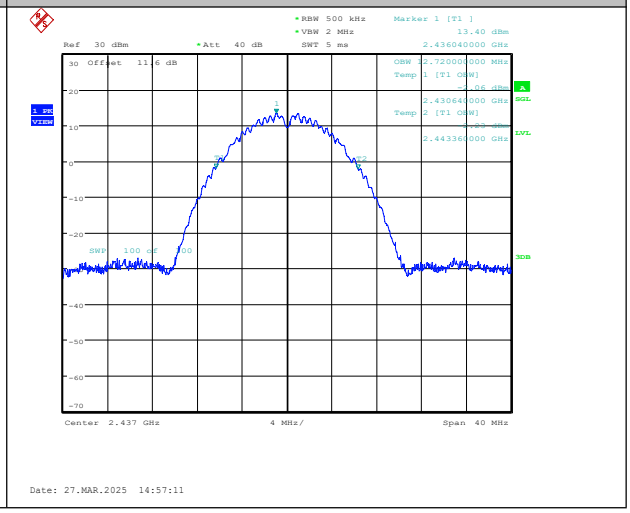
Test setup:



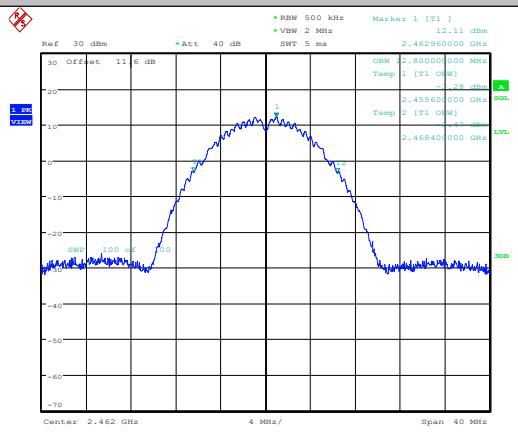
Measurement Results:

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.72	2405.7200	2418.4400	---	---
11B	Ant1	2437	12.72	2430.6400	2443.3600	---	---
11B	Ant1	2462	12.80	2455.6000	2468.4000	---	---
11G	Ant1	2412	17.16	2403.5200	2420.6800	---	---
11G	Ant1	2437	17.32	2428.3200	2445.6400	---	---
11G	Ant1	2462	17.28	2453.3600	2470.6400	---	---
11N20SISO	Ant1	2412	18.04	2403.0400	2421.0800	---	---
11N20SISO	Ant1	2437	18.28	2427.8400	2446.1200	---	---
11N20SISO	Ant1	2462	18.12	2452.9600	2471.0800	---	---

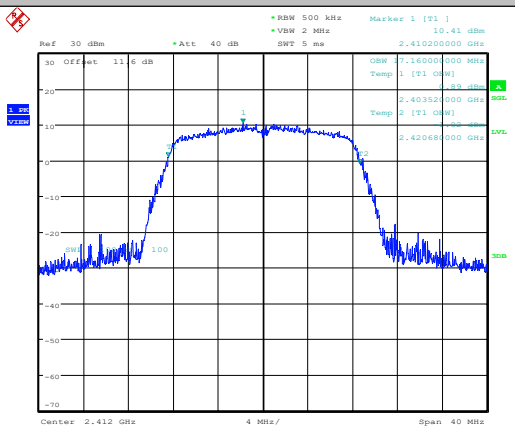
Test graph

11B-Ant1-2412	11B-Ant1-2437
	

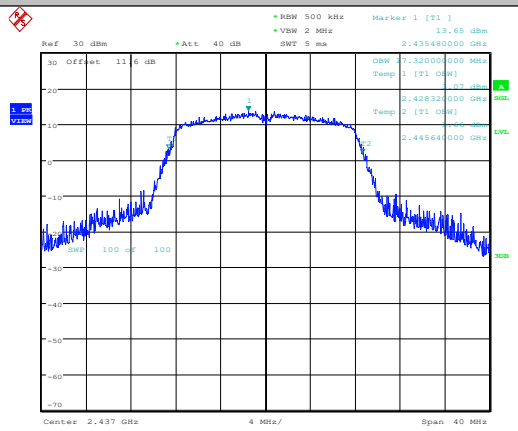
11B-Ant1-2462



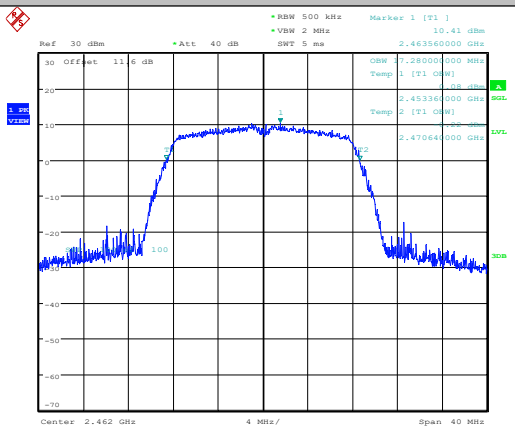
11G-Ant1-2412



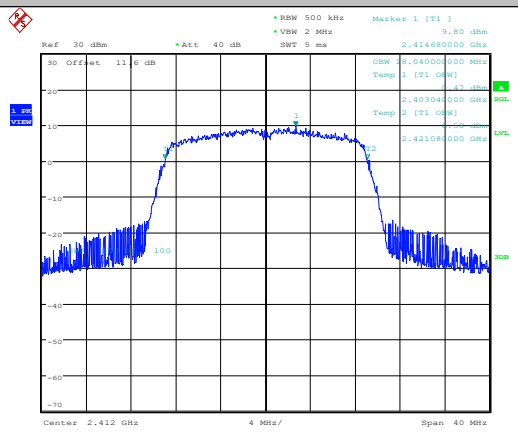
11G-Ant1-2437



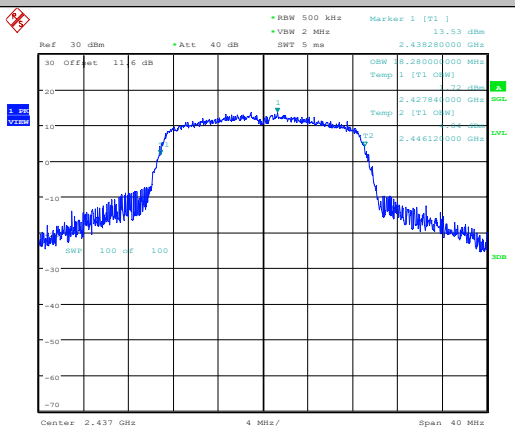
11G-Ant1-2462

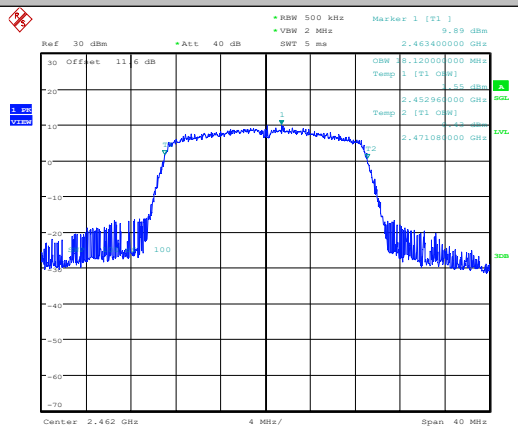


11N20SISO-Ant1-2412



11N20SISO-Ant1-2437



11N20SISO-Ant1-2462	/
	/

6.7. Band Edges Compliance

Specifications:	FCC 47 Part 15.247(d), RSS-247 5.5
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit (dBc)
FCC 47 Part 15.247(d)	>30
RSS-247 5.5	>30

Measurement Uncertainty:

Measurement Uncertainty	1.34dB

Test procedures:

The measurement is according to ANSI C63.10 clause11.11.

The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement. Enable EUT transmitter maximum power continuously.

Reference level measurement

1.Set instrument center frequency to DTS channel center frequency.

2.Set the span to ≥ 1.5 times the DTS bandwidth.

3.Set the RBW = 100 kHz.

4.Set the VBW ≥ [3 × RBW].

5.Detector = peak.

6.Sweep time = auto couple.

7.Trace mode = max hold.

8.Allow trace to fully stabilize.

9.Use the peak marker function to determine the maximum PSD level.

Emission level measurement

1.Set the center frequency and span to encompass frequency range to be measured.

2.Set the RBW = 100 kHz.

3.Set the VBW ≥ [3 × RBW].

4.Detector = peak.

5.Sweep time = auto couple.

6.Trace mode = max hold.

7.Allow trace to fully stabilize.

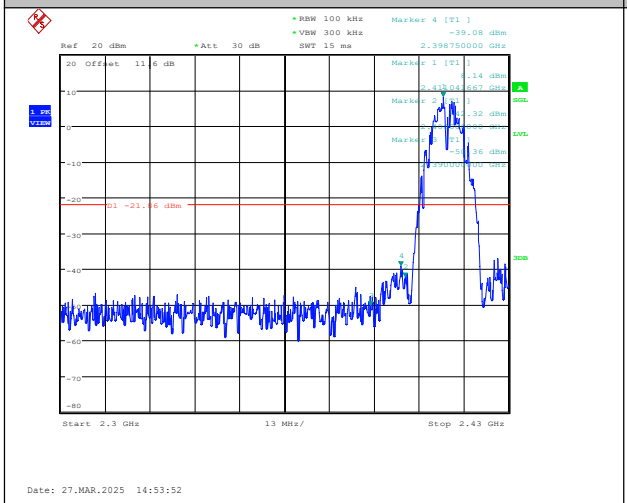
8.Use the peak marker function to determine the maximum amplitude level.

Measurement results:

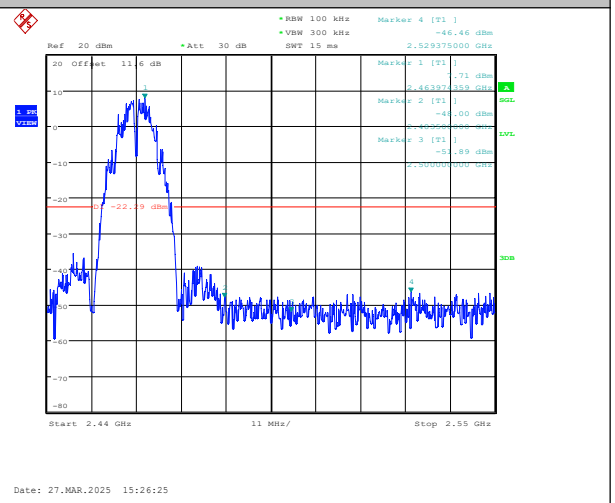
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.14	-39.08	≤-21.86	PASS
11B	Ant1	High	2462	7.71	-46.46	≤-22.29	PASS
11G	Ant1	Low	2412	3.03	-29.18	≤-26.97	PASS
11G	Ant1	High	2462	2.84	-42.00	≤-27.16	PASS
11N20SISO	Ant1	Low	2412	3.55	-27.98	≤-26.45	PASS
11N20SISO	Ant1	High	2462	3.90	-42.10	≤-26.10	PASS

Test graphs

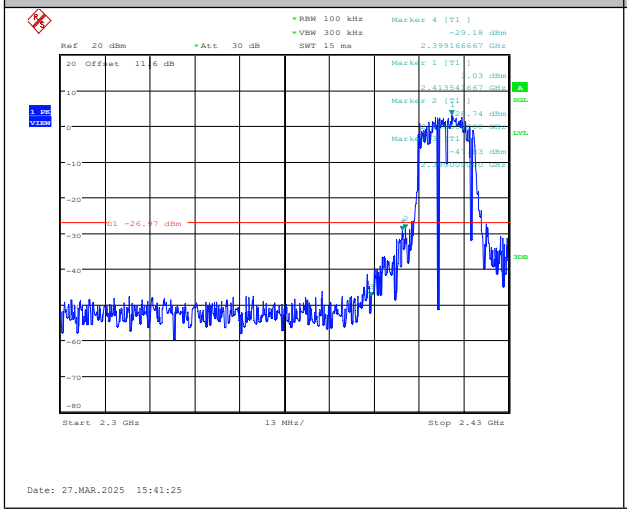
11B-Ant1-2412-PASS



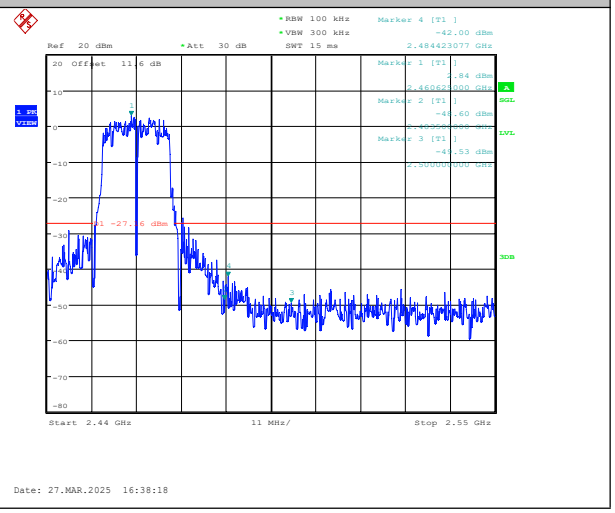
11B-Ant1-2462-PASS

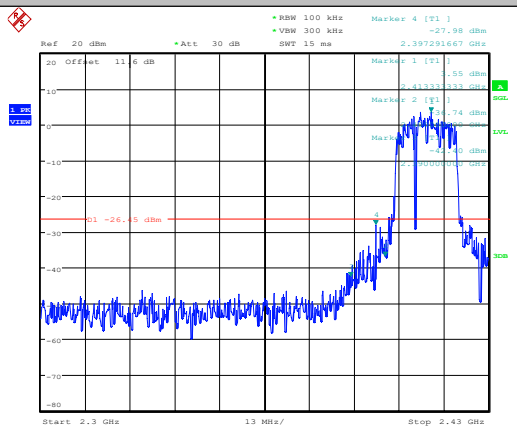
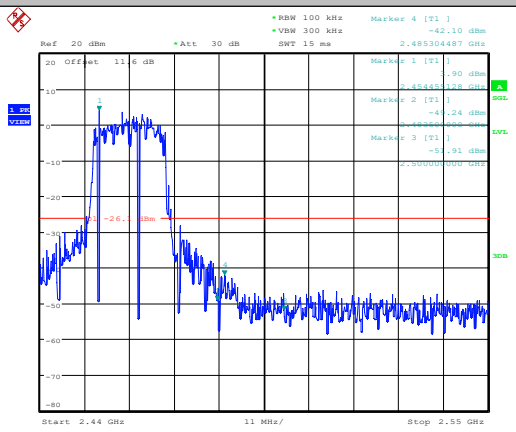


11G-Ant1-2412-PASS



11G-Ant1-2462-PASS



11N20SISO-Ant1-2412-PASS	11N20SISO-Ant1-2462-PASS
	
Date: 27.MAR.2025 16:56:05	Date: 27.MAR.2025 17:35:06

6.8. Transmitter Spurious Emission-conducted

Specifications:	FCC 47 Part 15.247(d), RSS-247 5.5
DUT Serial Number:	25B02W000005#S16
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Standard	Limit
FCC 47 Part 15.247(d)	30dB below highest level power in 100KHz bandwidth
RSS-247 5.5	30dB below highest level power in 100KHz bandwidth

Measurement Uncertainty:

Measurement Uncertainty	1.34dB

Test procedures:

This measurement is according to ANSI C63.10 clause 11.11.

The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.

Enable EUT transmitter maximum power continuously.

Reference level measurement

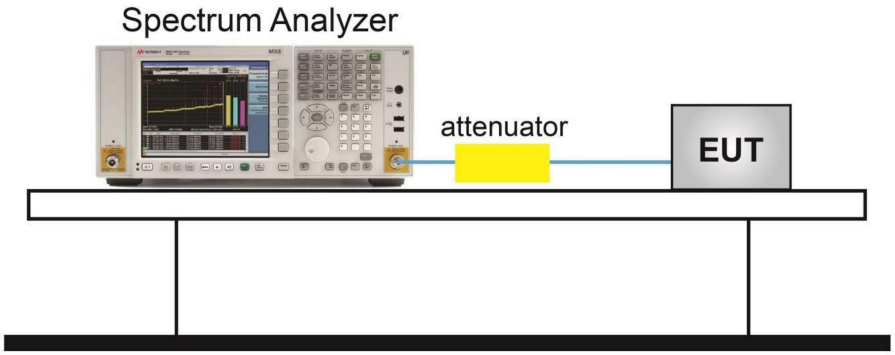
1. Set instrument center frequency to DTS channel center frequency.
2. Set the span to ≥ 1.5 times the DTS bandwidth.
3. Set the RBW = 100 kHz.
4. Set the VBW ≥ [3 × RBW].
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum PSD level.

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 100 kHz.
3. Set the VBW ≥ [3 × RBW].
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.

8. Use the peak marker function to determine the maximum amplitude level.

Test Setup:



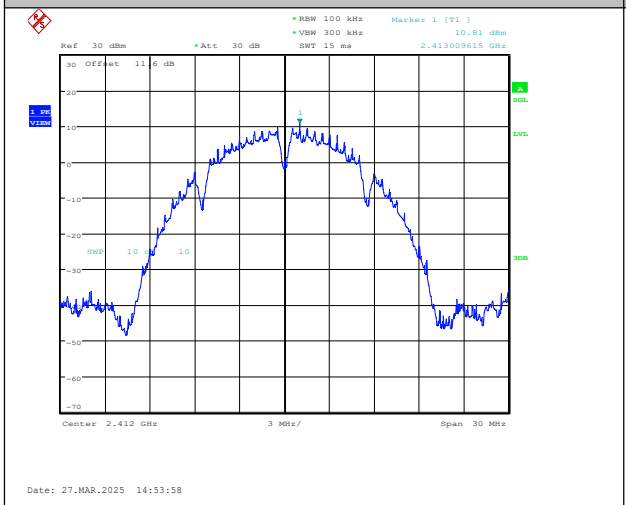
Measurement Results:

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	10.81	10.81	---	PASS
11B	Ant1	2412	30~1000	10.81	-34.11	≤-19.19	PASS
11B	Ant1	2412	1000~26500	10.81	-51.09	≤-19.19	PASS
11B	Ant1	2437	0~Reference	10.79	10.79	---	PASS
11B	Ant1	2437	30~1000	10.79	-32.80	≤-19.21	PASS
11B	Ant1	2437	1000~26500	10.79	-52.17	≤-19.21	PASS
11B	Ant1	2462	0~Reference	10.20	10.20	---	PASS
11B	Ant1	2462	30~1000	10.20	-34.64	≤-19.80	PASS
11B	Ant1	2462	1000~26500	10.20	-52.55	≤-19.80	PASS
11G	Ant1	2412	0~Reference	6.37	6.37	---	PASS
11G	Ant1	2412	30~1000	6.37	-44.93	≤-23.63	PASS
11G	Ant1	2412	1000~26500	6.37	-52.30	≤-23.63	PASS
11G	Ant1	2437	0~Reference	8.31	8.31	---	PASS
11G	Ant1	2437	30~1000	8.31	-42.78	≤-21.69	PASS
11G	Ant1	2437	1000~26500	8.31	-52.30	≤-21.69	PASS
11G	Ant1	2462	0~Reference	5.89	5.89	---	PASS
11G	Ant1	2462	30~1000	5.89	-44.13	≤-24.11	PASS
11G	Ant1	2462	1000~26500	5.89	-52.31	≤-24.11	PASS
11N20SISO	Ant1	2412	0~Reference	6.41	6.41	---	PASS
11N20SISO	Ant1	2412	30~1000	6.41	-44.31	≤-23.59	PASS
11N20SISO	Ant1	2412	1000~26500	6.41	-52.76	≤-23.59	PASS
11N20SISO	Ant1	2437	0~Reference	8.22	8.22	---	PASS
11N20SISO	Ant1	2437	30~1000	8.22	-42.55	≤-21.78	PASS

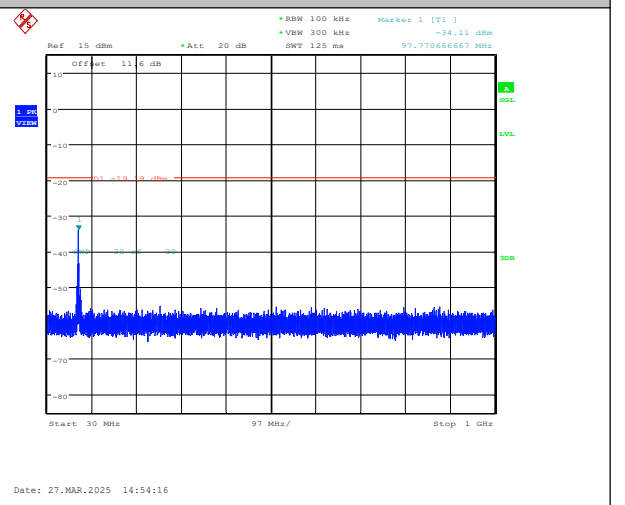
11N20SISO	Ant1	2437	1000~26500	8.22	-52.08	≤-21.78	PASS
11N20SISO	Ant1	2462	0~Reference	6.85	6.85	---	PASS
11N20SISO	Ant1	2462	30~1000	6.85	-44.86	≤-23.15	PASS
11N20SISO	Ant1	2462	1000~26500	6.85	-51.66	≤-23.15	PASS

Test graphs

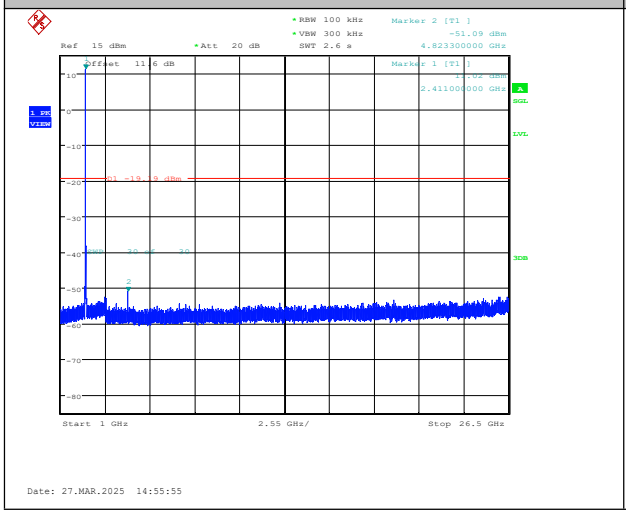
11B-Ant1-2412-0~Reference-PASS



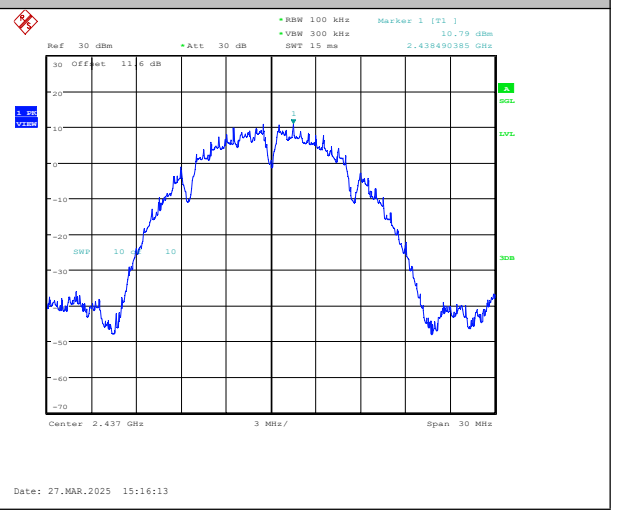
11B-Ant1-2412-30~1000-PASS



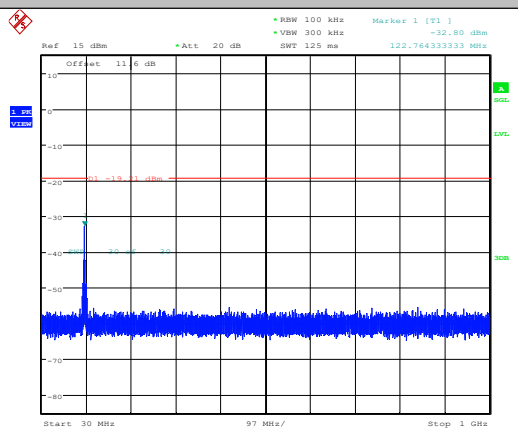
11B-Ant1-2412-1000~26500-PASS



11B-Ant1-2437-0~Reference-PASS

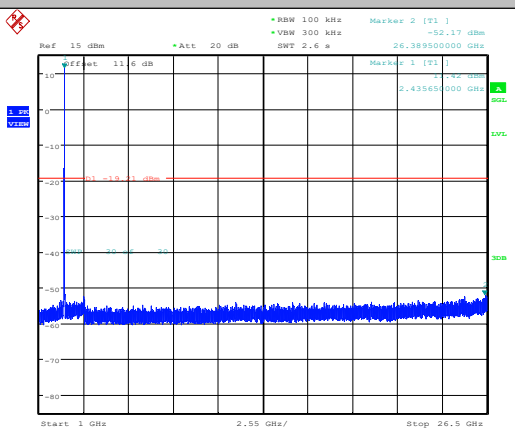


11B-Ant1-2437-30~1000-PASS



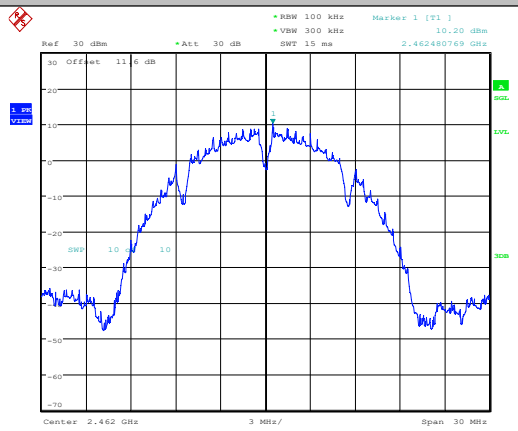
Date: 27.MAR.2025 15:16:31

11B-Ant1-2437-1000~26500-PASS



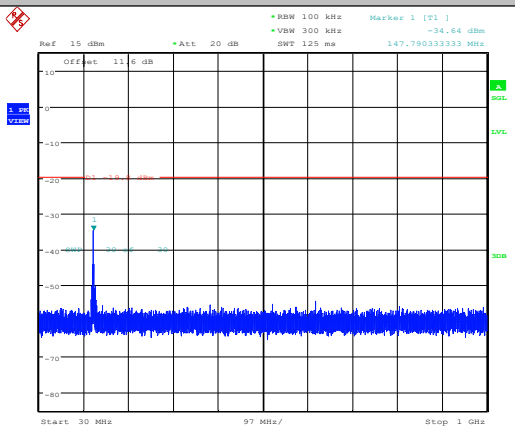
Date: 27.MAR.2025 15:18:11

11B-Ant1-2462-0~Reference-PASS



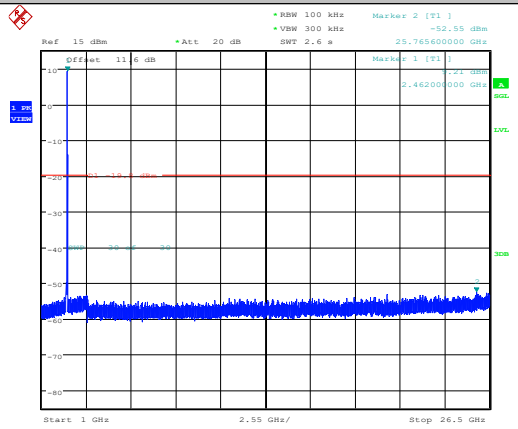
Date: 27.MAR.2025 15:26:30

11B-Ant1-2462-30~1000-PASS



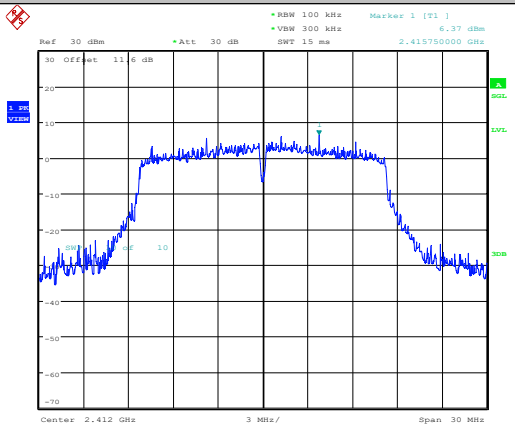
Date: 27.MAR.2025 15:26:48

11B-Ant1-2462-1000~26500-PASS



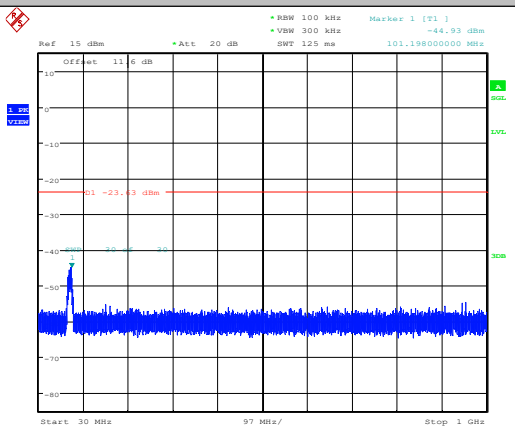
Date: 27.MAR.2025 15:28:29

11G-Ant1-2412-0~Reference-PASS



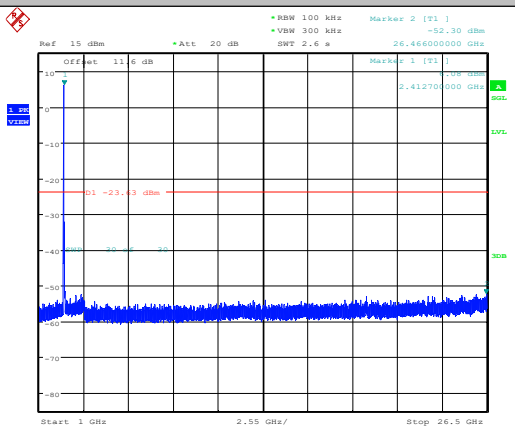
Date: 27.MAR.2025 15:41:31

11G-Ant1-2412-30~1000-PASS



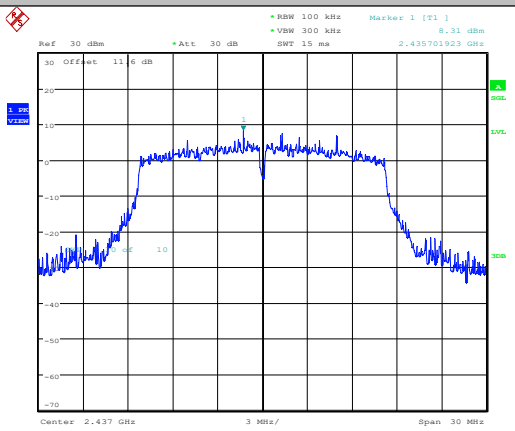
Date: 27.MAR.2025 15:41:49

11G-Ant1-2412-1000~26500-PASS



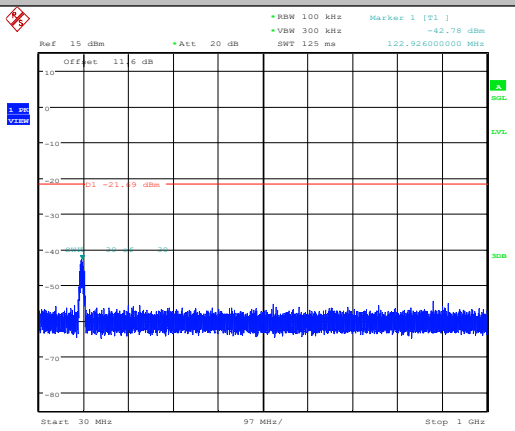
Date: 27.MAR.2025 15:43:31

11G-Ant1-2437-0~Reference-PASS



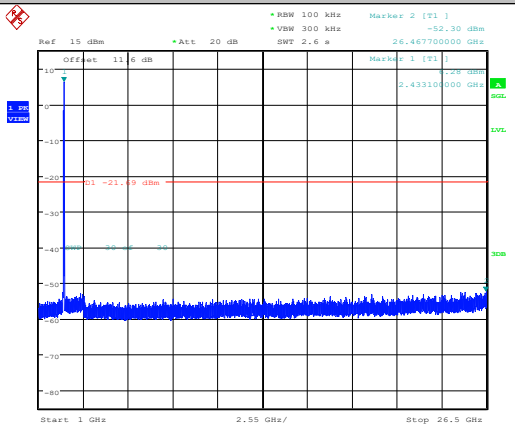
Date: 27.MAR.2025 16:09:11

11G-Ant1-2437-30~1000-PASS



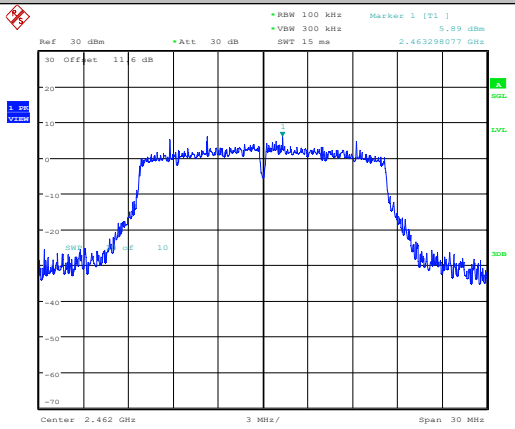
Date: 27.MAR.2025 16:09:29

11G-Ant1-2437-1000~26500-PASS



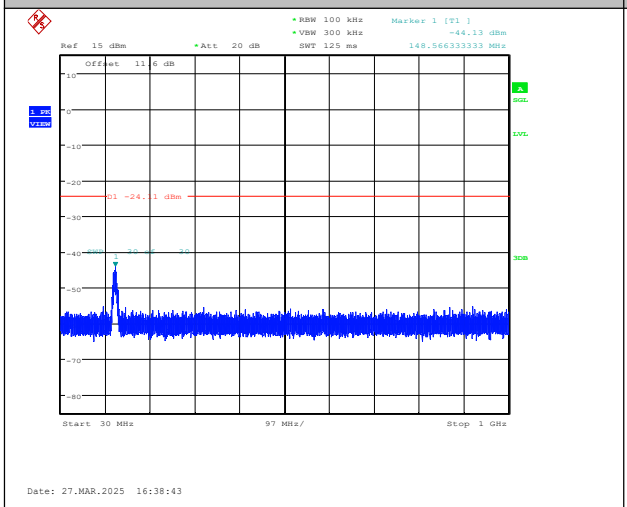
Date: 27.MAR.2025 16:11:12

11G-Ant1-2462-0~Reference-PASS

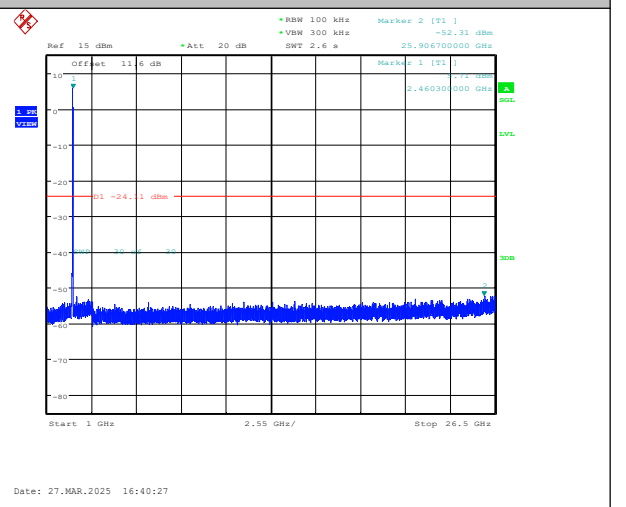


Date: 27.MAR.2025 16:38:24

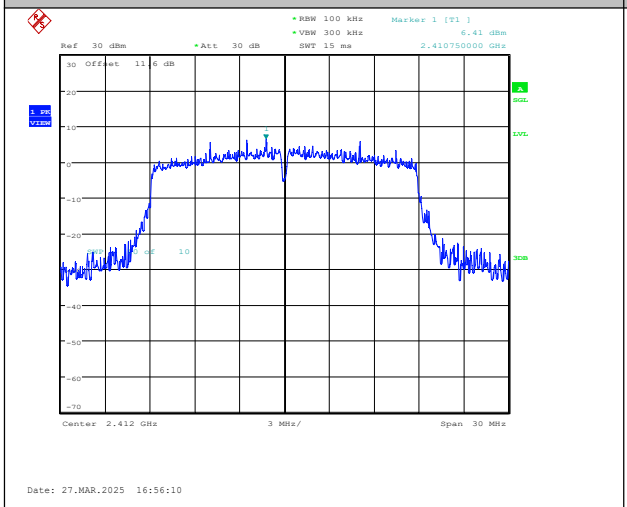
11G-Ant1-2462-30~1000-PASS



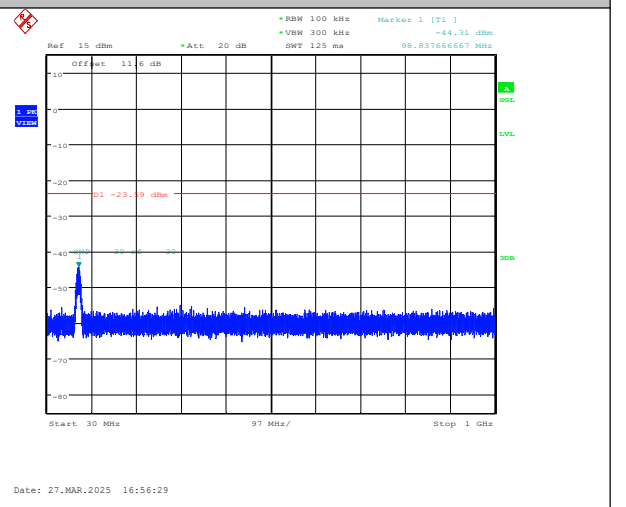
11G-Ant1-2462-1000~26500-PASS



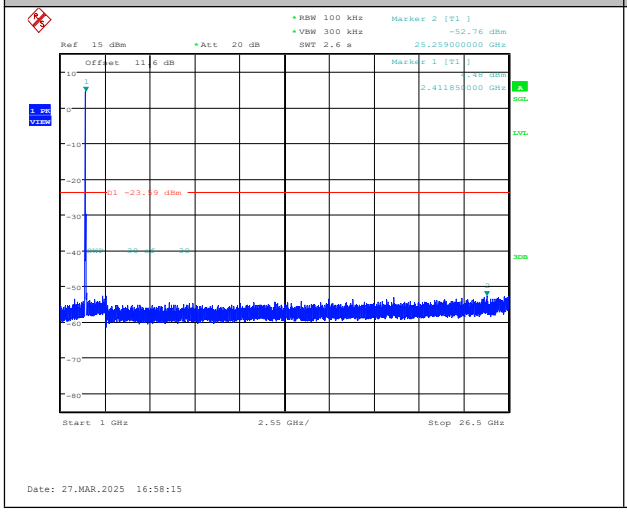
11N20SISO-Ant1-2412-0~Reference-PASS



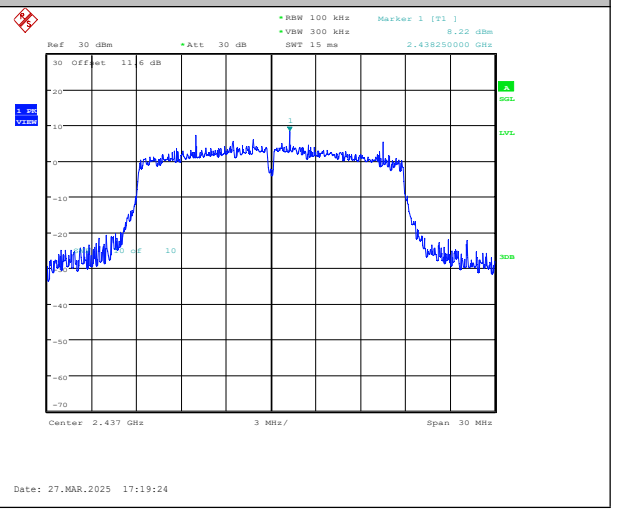
11N20SISO-Ant1-2412-30~1000-PASS

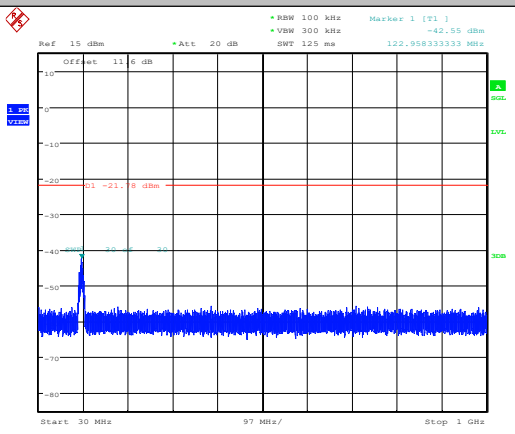
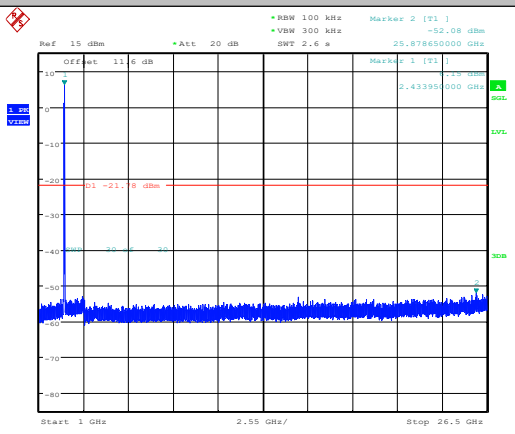
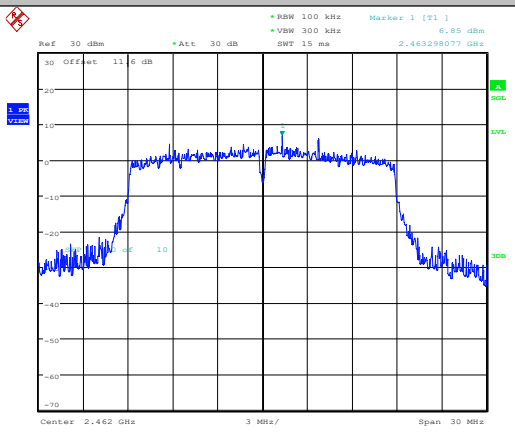
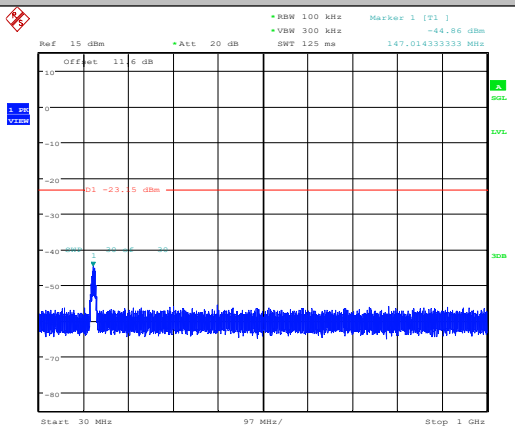
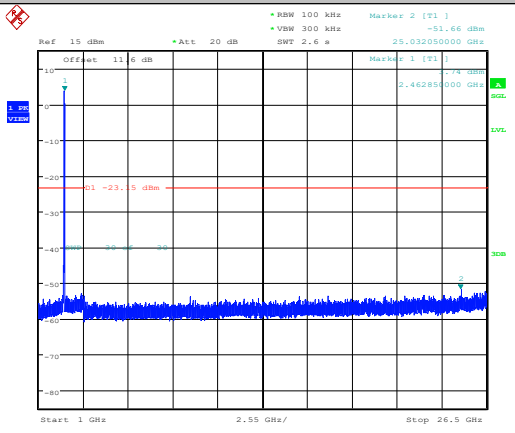


11N20SISO-Ant1-2412-1000~26500-PASS



11N20SISO-Ant1-2437-0~Reference-PASS



11N20SISO-Ant1-2437-30~1000-PASS	11N20SISO-Ant1-2437-1000~26500-PASS
	
11N20SISO-Ant1-2462-0~Reference-PASS	11N20SISO-Ant1-2462-30~1000-PASS
	
11N20SISO-Ant1-2462-1000~26500-PASS	/
	/

Note:

1. The out-of- limit signal in the picture is the main frequency signal.

2. The test data below 30MHz is more than 20dB lower than the limit value, so it is not provided in the report.

6.9. Transmitter Spurious Emission-Radiated

Specifications:	FCC 47 Part 15.247/15.205/15.209, RSS-GEN 8.9, 8.10
DUT Serial Number:	25B02W000005#S07
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit Level Construction:

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
0.009~0.49	2400/F (kHz)	129-94
0.49~1.705	24000/F (kHz)	74-63
1.705~30	30	70
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

Measurement Uncertainty:

Measurement Uncertainty	30MHz-150MHz 3.38 dB (k=2) 150MHz-1000MHz 4.09dB (k=2) 1000MHz-6000MHz 4.84 dB (k=2) 6000MHz-18000MHz 4.52 dB (k=2) 18000MHz-26500MHz 6.19 dB (k=2) 26500MHz-40000MHz 6.03 dB (k=2)

Test procedures:

The measurement is according to ANSI C63.10 clause 11.11 and 11.12.

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, For emissions testing at or below 1 GHz, the table height shall be 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT.

Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height varied from 1m to 4m and the EUT azimuth were varied from 0° to 360° in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Test Settings – Below 1GHz (Quasi-Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 100 kHz.
3. Set the VBW = 300 kHz.
4. Detector = quasi-peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Trace was allowed to stabilize.

Test Settings – Above 1GHz (Peak Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = peak
5. Trace mode = max hold
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

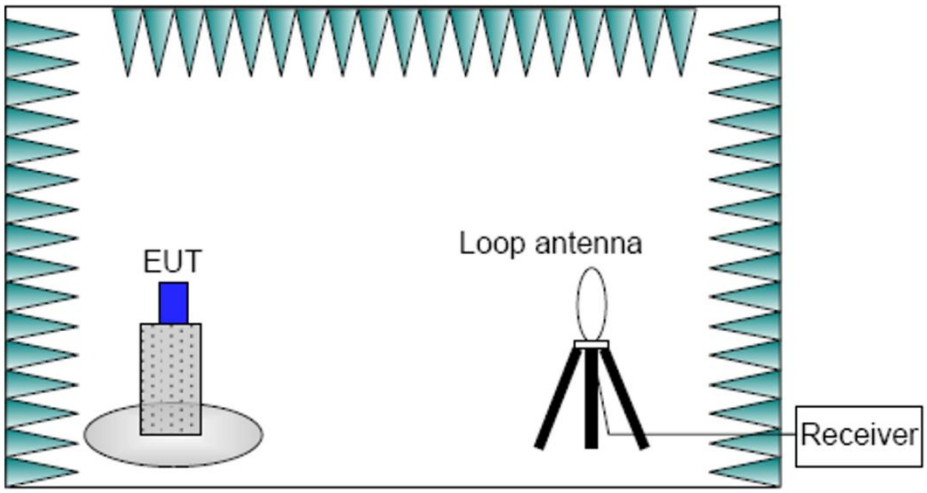
Test Settings – Above 1GHz (Average Field Strength Measurements)

1. Set the center frequency and span to encompass frequency range to be measured.
2. Set the RBW = 1MHz.
3. Set the VBW = 3MHz.
4. Detector = power average (RMS).
5. Number of measurement points = 1001 (Number of points must be ≥ 2 × span\\RBW)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

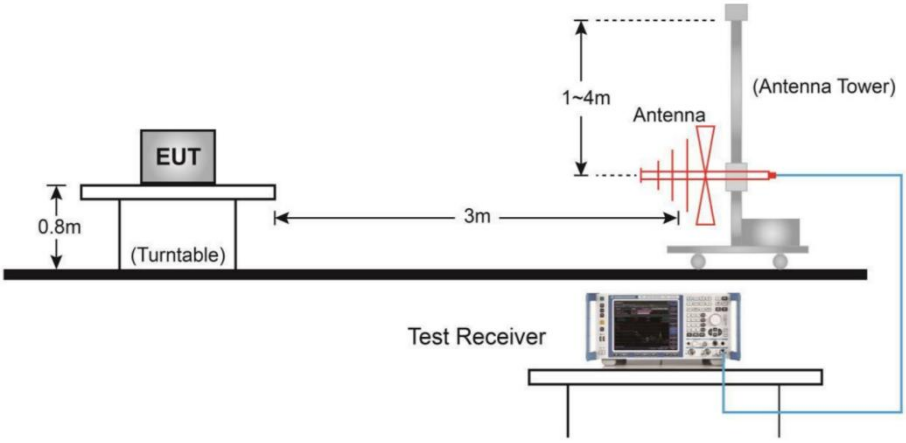
Frequency of emission	RBW/VBW	Sweep Time (s)
0.009~30	9KHz/30KHz	Auto
30~1000	100KHz/300KHz	5
1000~4000	1MHz/3MHz	15
4000~18000	1MHz/3MHz	40
18000~26500	1MHz/3MHz	20

Test Setup:

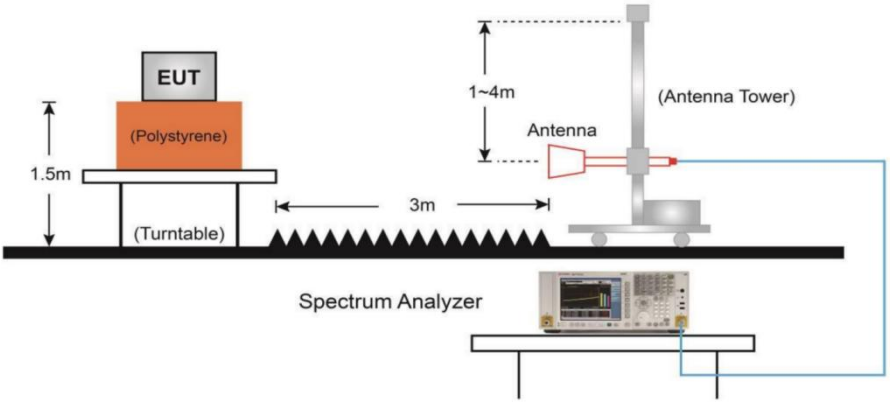
Below 30MHz Test Setup



Below 1GHz Test Setup



Above 1GHz Test Setup



Measurement Results:

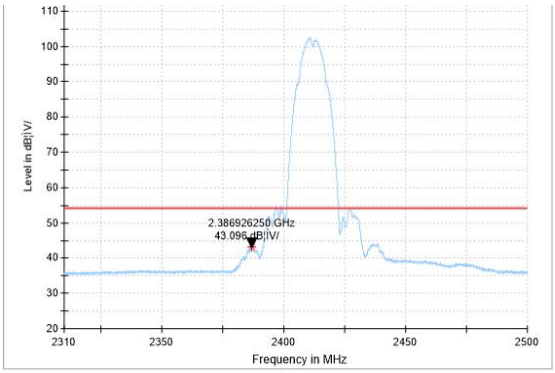
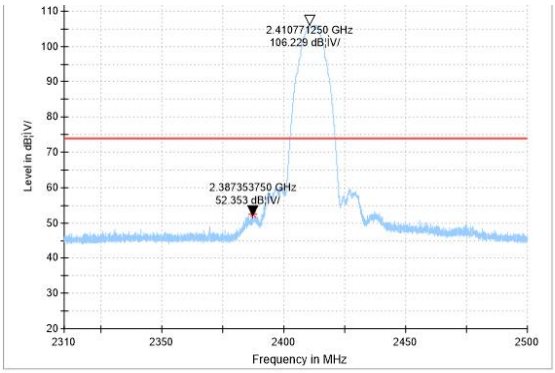
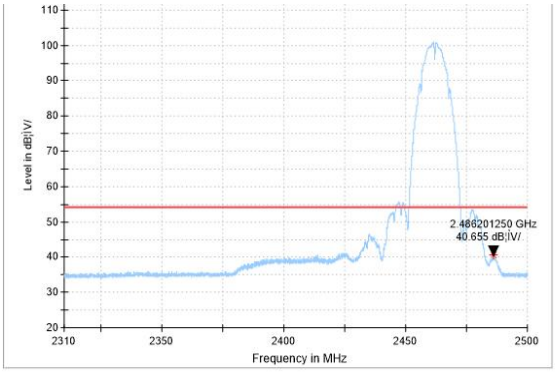
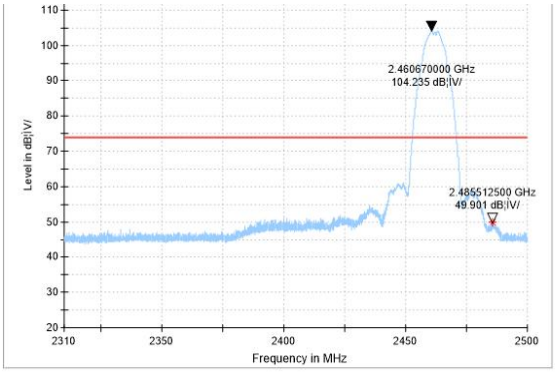
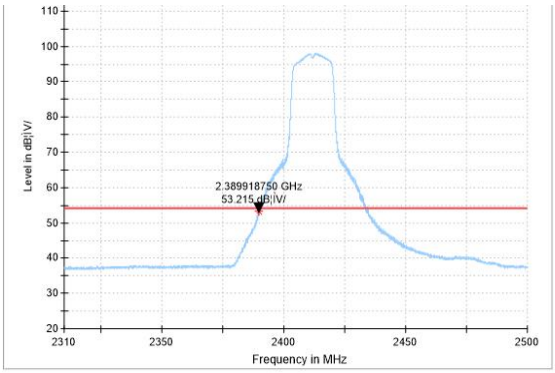
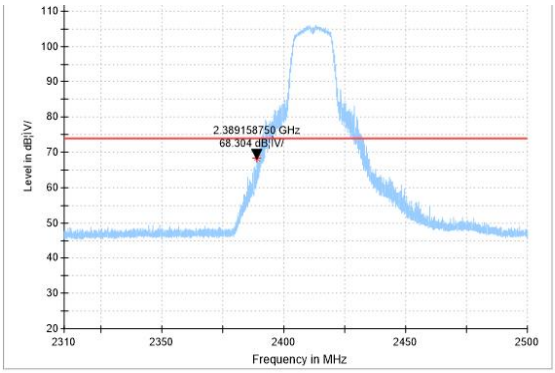
A "reference path loss" is established and A_{Rpi} is the attenuation of "reference path loss", and including the gain of receive antenna , the gain of the preamplifier, the cable loss.

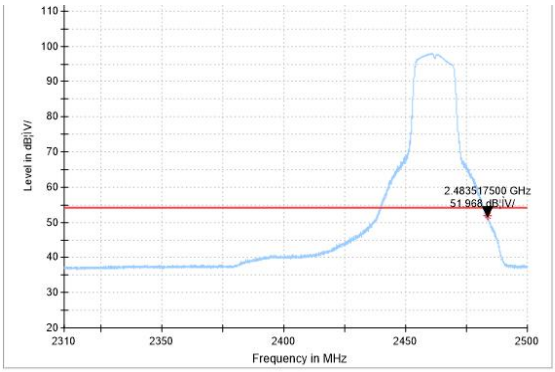
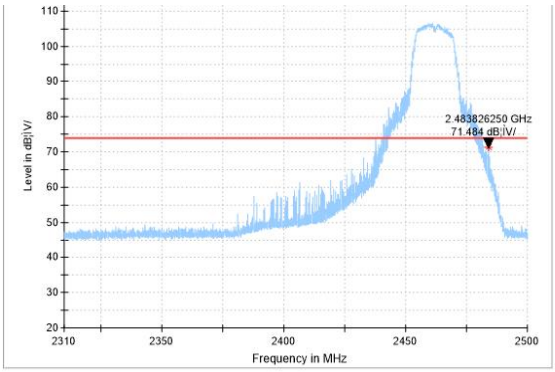
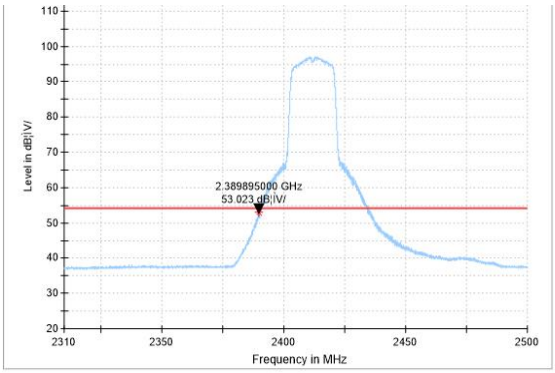
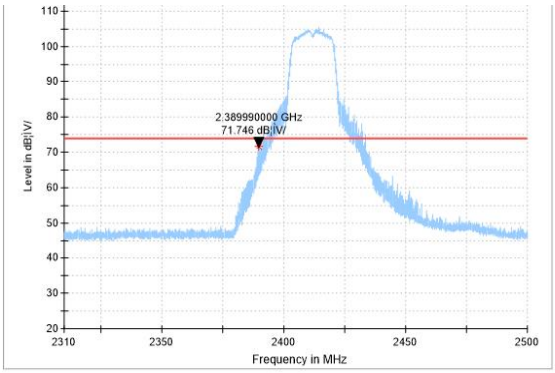
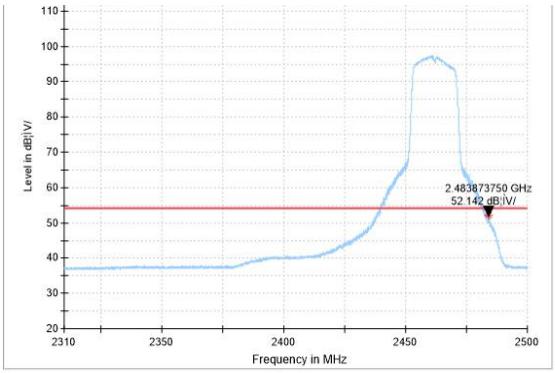
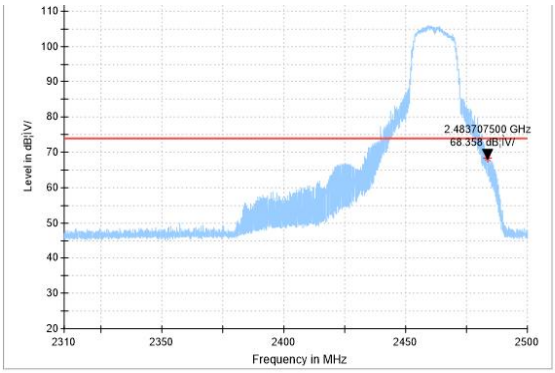
P_{Mea} is the field strength recorded from the instrument.

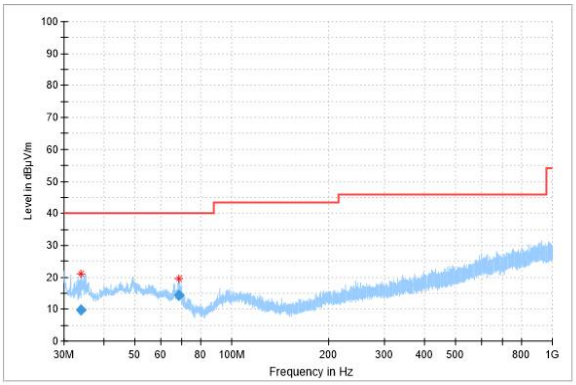
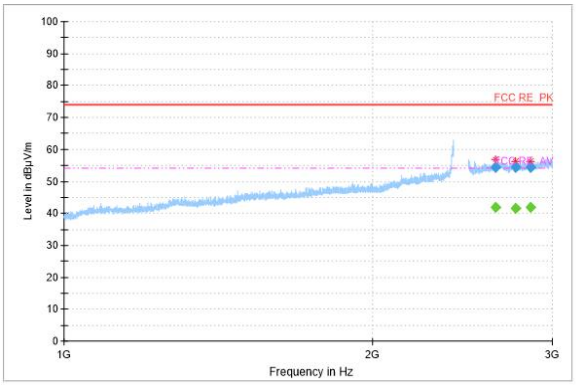
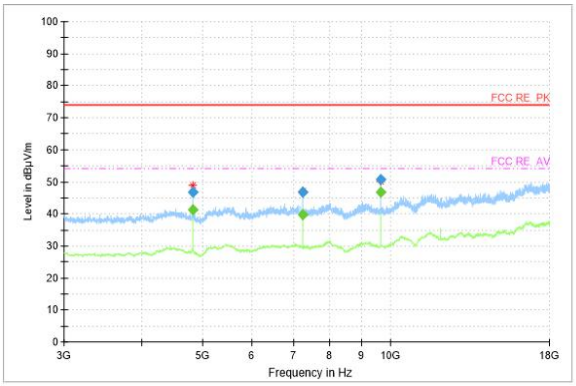
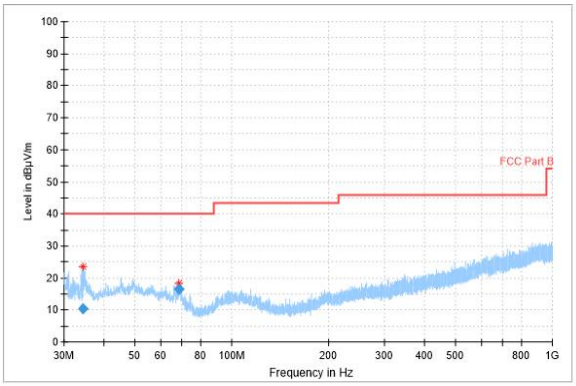
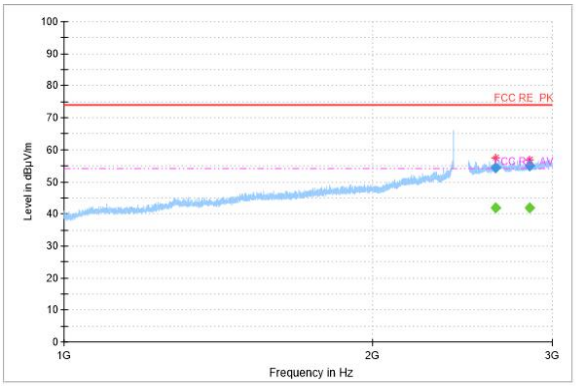
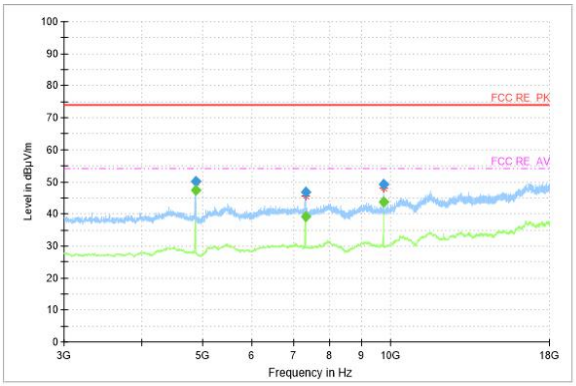
The measurement results are obtained as described below:

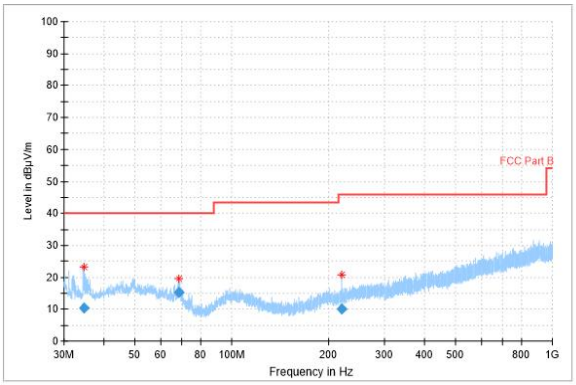
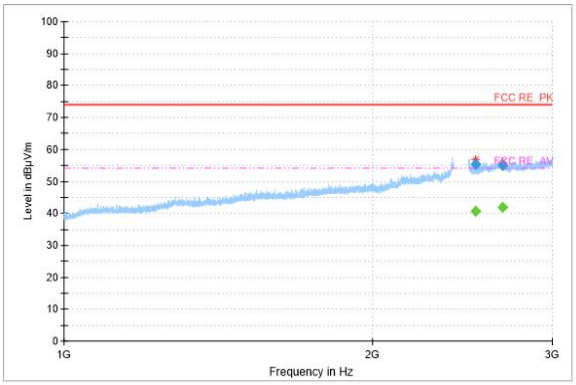
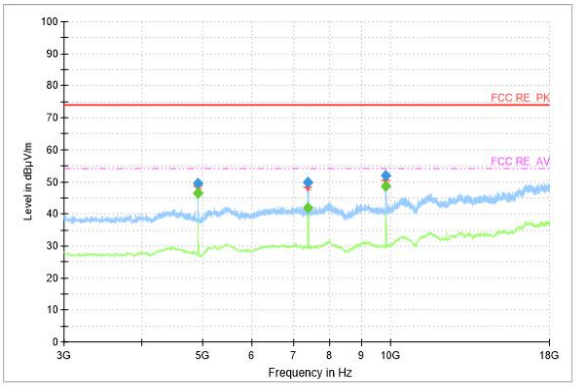
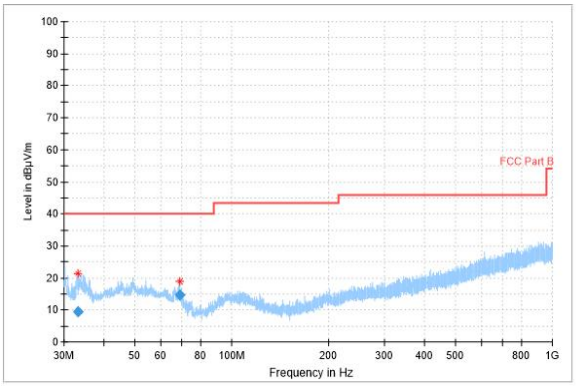
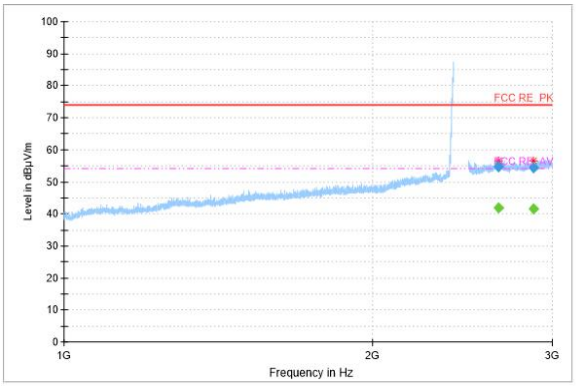
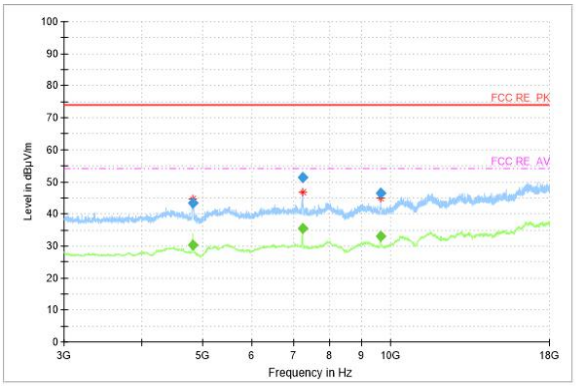
A_{Rpi} = Cable loss + Antenna Factor-Preamplifier gain

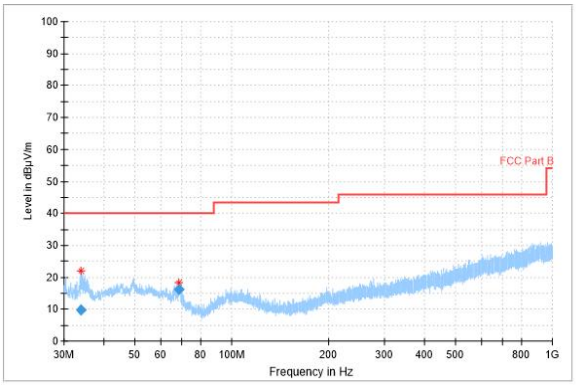
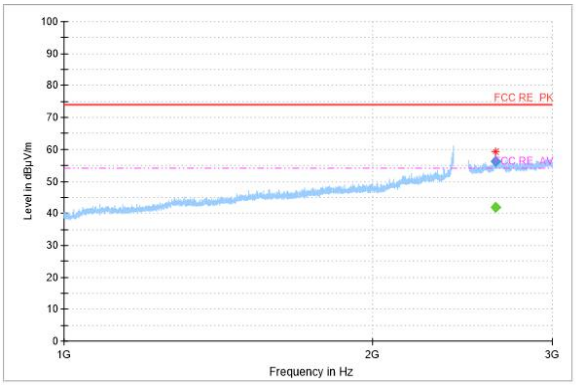
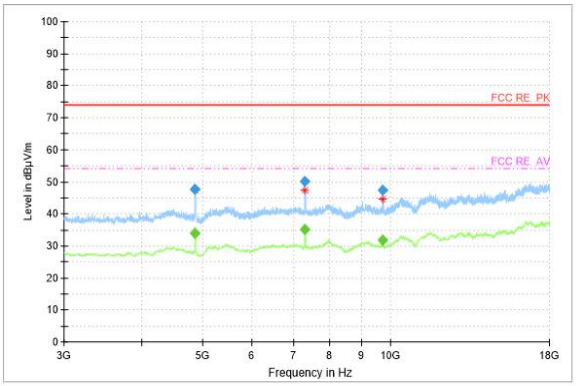
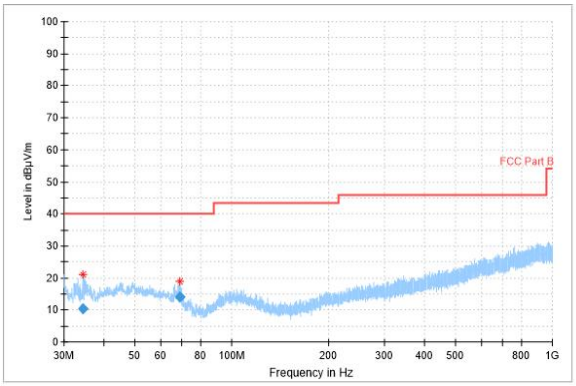
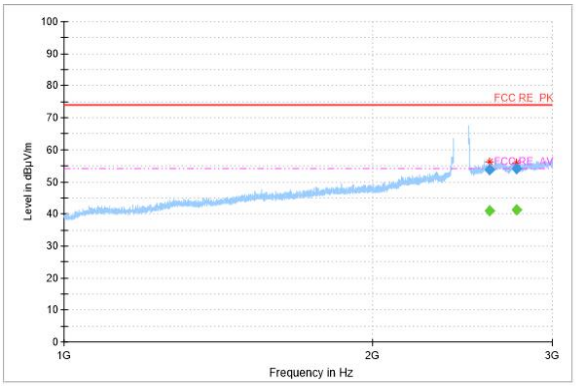
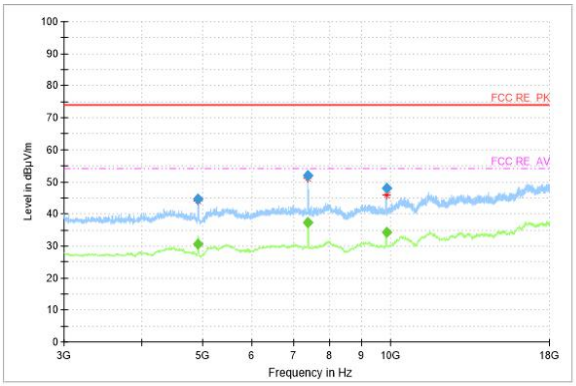
Result = PMea + Cable loss + Antenna Factor-Preamplifier gain = PMea + ARpi .

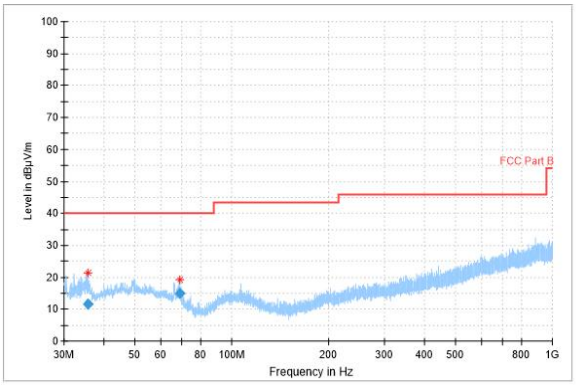
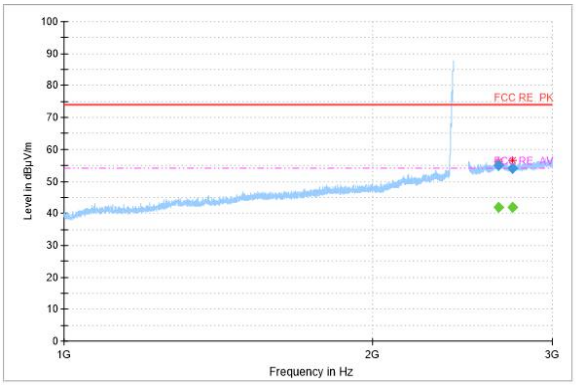
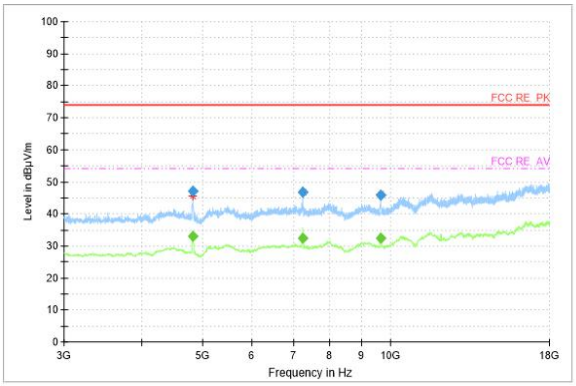
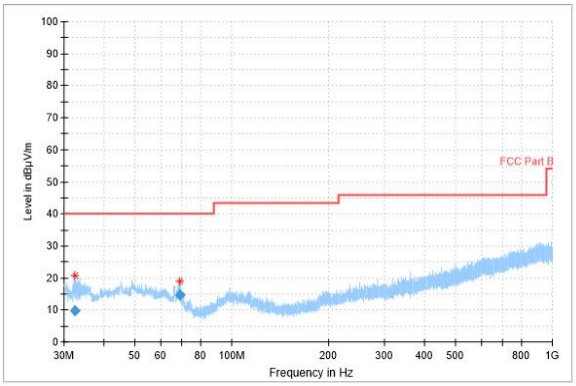
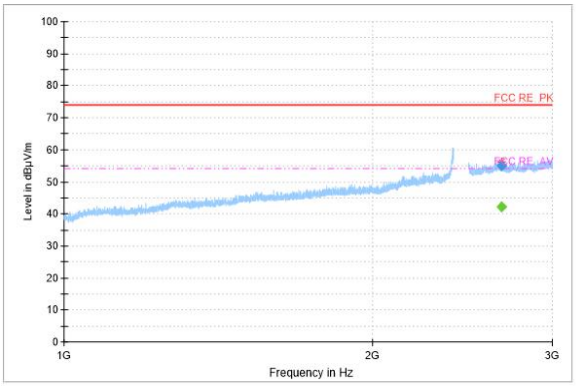
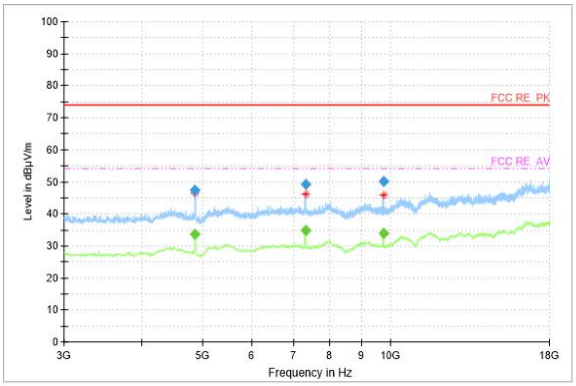
BANDEDGE-11B-CH1 -AV	BANDEDGE-11B-CH1 -PK
	
BANDEDGE-11B-CH11-AV	BANDEDGE-11B-CH11 -PK
	
BANDEDGE-11G-CH1 -AV	BANDEDGE-11G-CH1 -PK
	

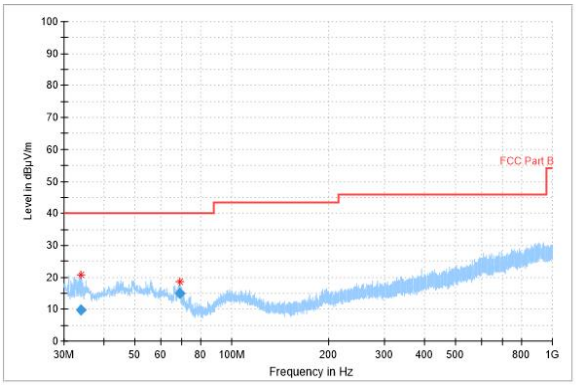
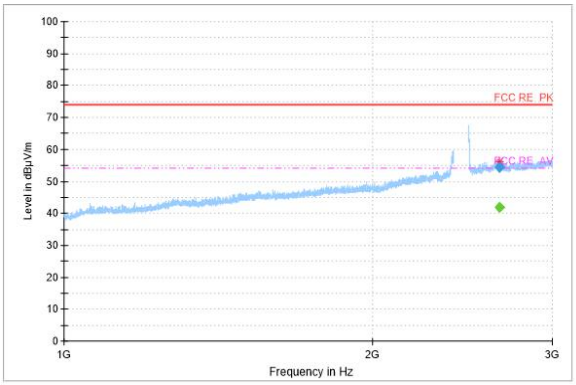
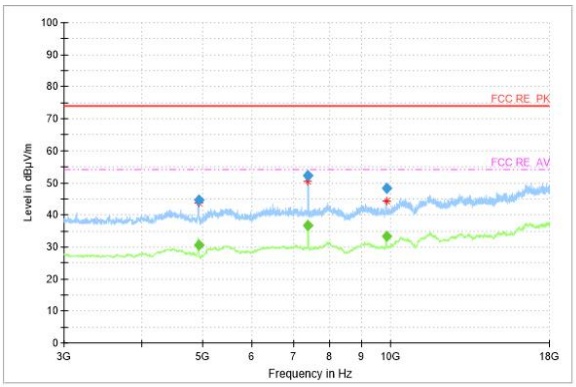
BANDEDGE-11G-CH11 -AV	BANDEDGE-11G-CH11 -PK
	
BANDEDGE-11N-CH1 -AV	BANDEDGE-11N-CH1 -PK
	
BANDEDGE-11N-CH11 -AV	BANDEDGE-11N-CH11 -PK
	

RSE-11B-CH1-30MHz-1GHz	RSE-11B-CH1-1GHz-3GHz
	
RSE-11B-CH1-3GHz-18GHz	**RSE-11B-CH6-30MHz-1GHz**
	
RSE-11B-CH6-1GHz-3GHz	**RSE-11B-CH6-3GHz-18GHz**
	

RSE-11B-CH11-30MHz-1GHz	RSE-11B-CH11-1GHz-3GHz
	
RSE-11B-CH11-3GHz-18GHz	RSE-11G-CH1-30MHz-1GHz
	
RSE-11G-CH1-1GHz-3GHz	RSE-11G-CH1-3GHz-18GHz
	

RSE-11G-CH6-30MHz-1GHz	RSE-11G-CH6-1GHz-3GHz
	
RSE-11G-CH6-3GHz-18GHz	RSE-11G-CH11-30MHz-1GHz
	
RSE-11G-CH11-1GHz-3GHz	RSE-11G-CH11-3GHz-18GHz
	

RSE-11N-CH1-30MHz-1GHz	RSE-11N-CH1-1GHz-3GHz
	
RSE-11N-CH1-3GHz-18GHz	**RSE-11N-CH6-30MHz-1GHz**
	
RSE-11N-CH6-1GHz-3GHz	**RSE-11N-CH6-3GHz-18GHz**
	

RSE-11N-CH11-30MHz-1GHz	RSE-11N-CH11-1GHz-3GHz
	
RSE-11N-CH11-3GHz-18GHz	/
	/

Note：

1. The out-of- limit signal in the picture is the main frequency signal.
2. Only data in worst mode is provided.
3. Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the Emissions in the frequency band 18GHz-26.5GHz is more than 20dB below the limit are not report.
4. The test data below 30MHz is more than 20dB lower than the limit value, so it is not provided in the report.
5. Horizontal and vertical polarity is all have been tested, the result of them is synthesized in the above data diagram.

RSE-11B-CH1-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBµV/m)	ARpl (dB)	PMea (dBµV/m)	Margin(dB)	Limit(dBµV/m)	Polarity
33.9	9.77	-15	24.77	30.23	40.00	H
68.5	14.39	-15	29.39	25.61	40.00	H

RSE-11B-CH1-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2636.7	54.4	17	37.4	19.60	74.00	V
2759.8	54.48	17	37.48	19.52	74.00	H
2856.2	54.5	18	36.5	19.51	74.00	V

RSE-11B-CH1-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2636.7	41.74	17	24.74	12.26	54.00	V
2759.8	41.47	17	24.47	12.53	54.00	H
2856.2	41.92	18	23.92	12.08	54.00	V

RSE-11B-CH1-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4823.5	46.78	-4	50.78	27.22	74.00	H
7236.5	46.85	-2	48.85	27.15	74.00	H
9647.8	50.71	-1	51.71	23.29	74.00	H

RSE-11B-CH1-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4823.5	41.24	-4	45.24	12.76	54.00	H
7236.5	39.69	-2	41.69	14.31	54.00	H
9647.8	46.76	-1	47.76	7.24	54.00	H

RSE-11B-CH6-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.4	10.5	-15	25.5	29.50	40.00	H
68.2	16.37	-15	31.37	23.63	40.00	H

RSE-11B-CH6-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2640.0	54.4	17	37.4	19.60	74.00	V
2848.1	54.92	18	36.92	19.08	74.00	V

RSE-11B-CH6-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2640.0	41.81	17	24.81	12.19	54.00	V
2848.1	41.99	18	23.99	12.01	54.00	V

RSE-11B-CH6-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4874.1	50.28	-3	53.28	23.72	74.00	V
7312.0	46.89	-2	48.89	27.11	74.00	H
9748.1	49.15	-1	50.15	24.85	74.00	H

RSE-11B-CH6-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4874.1	47.3	-3	50.3	6.70	54.00	V
7312.0	39.17	-2	41.17	14.83	54.00	H
9748.1	43.87	-1	44.87	10.13	54.00	H

RSE-11B-CH11-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.5	10.34	-15	25.34	29.66	40.00	H
68.2	15.32	-15	30.32	24.68	40.00	H
220.7	9.96	-12	21.96	36.04	46.00	H

RSE-11B-CH11-1GHz-3GHz

Frequency	MaxPeak(dBμV/m)	ARpl (dB)	PMea	Margin(dB)	Limit(dBμV/m)	Polarity

(MHz)			(dBμV/m)			
2522.2	55.31	16	39.31	18.69	74.00	V
2683.0	54.97	17	37.97	19.03	74.00	V

RSE-11B-CH11-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2522.2	40.54	16	24.54	13.46	54.00	V
2683.0	41.89	17	24.89	12.11	54.00	V

RSE-11B-CH11-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4923.8	49.6	-3	52.6	24.40	74.00	V
7385.6	49.97	-2	51.97	24.03	74.00	H
9848.0	52.05	-1	53.05	21.95	74.00	H

RSE-11B-CH11-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4923.8	46.52	-3	49.52	7.48	54.00	V
7385.6	41.96	-2	43.96	12.04	54.00	H
9848.0	48.69	-1	49.69	5.31	54.00	H

RSE-11G-CH1-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.2	9.42	-15	24.42	30.58	40.00	H
69.0	14.6	-15	29.6	25.40	40.00	H

RSE-11G-CH1-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2656.4	54.83	18	36.83	19.17	74.00	H

2876.1	54.5	17	37.5	19.50	74.00	H

RSE-11G-CH1-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2656.4	41.89	18	23.89	12.11	54.00	H
2876.1	41.53	17	24.53	12.47	54.00	H

RSE-11G-CH1-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4826.8	43.3	-4	47.3	30.70	74.00	V
7240.4	51.48	-2	53.48	22.52	74.00	H
9657.2	46.54	-1	47.54	27.46	74.00	H

RSE-11G-CH1-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4826.8	30.4	-4	34.4	23.60	54.00	V
7240.4	35.37	-2	37.37	18.63	54.00	H
9657.2	33.17	-1	34.17	20.83	54.00	H

RSE-11G-CH6-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.9	9.91	-15	24.91	30.09	40.00	H
68.2	16.11	-15	31.11	23.89	40.00	H

RSE-11G-CH6-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2639.2	56.32	17	39.32	17.68	74.00	V

RSE-11G-CH6-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2639.2	41.78	17	24.78	12.22	54.00	V

RSE-11G-CH6-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4870.4	47.74	-3	50.74	26.26	74.00	V
7303.6	50.2	-2	52.2	23.80	74.00	H

9731.8	47.29	-1	48.29	26.71	74.00	H

RSE-11G-CH6-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4870.4	33.82	-3	36.82	20.18	54.00	V
7303.6	35.21	-2	37.21	18.79	54.00	H
9731.8	31.85	-1	32.85	22.15	54.00	H

RSE-11G-CH11-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
34.5	10.54	-15	25.54	29.47	40.00	H
69.1	13.98	-15	28.98	26.02	40.00	H

RSE-11G-CH11-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2606.6	53.96	17	36.96	20.04	74.00	V
2765.0	54.11	17	37.11	19.89	74.00	V

RSE-11G-CH11-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2606.6	40.98	17	23.98	13.02	54.00	V
2765.0	41.29	17	24.29	12.71	54.00	V

RSE-11G-CH11-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4920.0	44.51	-3	47.51	29.49	74.00	V
7381.9	52.12	-2	54.12	21.88	74.00	H
9855.5	47.94	-1	48.94	26.06	74.00	H

RSE-11G-CH11-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4920.0	30.68	-3	33.68	23.32	54.00	V
7381.9	37.35	-2	39.35	16.65	54.00	H
9855.5	34.18	-1	35.18	19.82	54.00	H

RSE-11N-CH1-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
35.6	11.48	-14	25.48	28.52	40.00	H
69.0	15.12	-15	30.12	24.88	40.00	H

RSE-11N-CH1-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2657.9	55.07	18	37.07	18.93	74.00	V
2741.8	54.27	17	37.27	19.73	74.00	H

RSE-11N-CH1-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2657.9	41.92	18	23.92	12.08	54.00	V
2741.8	41.88	17	24.88	12.12	54.00	H

RSE-11N-CH1-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4829.1	47.1	-4	51.1	26.90	74.00	H
7237.0	46.83	-2	48.83	27.17	74.00	H
9658.1	45.79	-1	46.79	28.21	74.00	H

RSE-11N-CH1-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4829.1	33.15	-4	37.15	20.85	54.00	H
7237.0	32.32	-2	34.32	21.68	54.00	H
9658.1	32.56	-1	33.56	21.44	54.00	H

RSE-11N-CH6-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
32.5	9.8	-15	24.8	30.20	40.00	H
69.1	14.59	-15	29.59	25.41	40.00	H

RSE-11N-CH6-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2675.6	54.91	18	36.91	19.09	74.00	V

RSE-11N-CH6-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2675.6	42.19	18	24.19	11.81	54.00	V

RSE-11N-CH6-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4869.4	47.46	-3	50.46	26.54	74.00	V
7310.1	49.11	-2	51.11	24.89	74.00	H
9743.9	50.03	-1	51.03	23.97	74.00	H

RSE-11N-CH6-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4869.4	33.62	-3	36.62	20.38	54.00	V
7310.1	34.95	-2	36.95	19.05	54.00	H

9743.9	34.01	-1	35.01	19.99	54.00	H

RSE-11N-CH11-30MHz-1GHz

Frequency (MHz)	QuasiPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
33.9	9.87	-15	24.87	30.13	40.00	H
69.0	15.08	-15	30.08	24.92	40.00	H

RSE-11N-CH11-1GHz-3GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2664.8	54.44	18	36.44	19.56	74.00	V

RSE-11N-CH11-1GHz-3GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
2664.8	42.02	18	24.02	11.98	54.00	V

RSE-11N-CH11-3GHz-18GHz

Frequency (MHz)	MaxPeak(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4928.9	44.66	-3	47.66	29.34	74.00	V
7383.2	52.37	-2	54.37	21.63	74.00	H
9855.5	48.18	-1	49.18	25.82	74.00	H

RSE-11N-CH11-3GHz-18GHz

Frequency (MHz)	Average(dBμV/m)	ARpl (dB)	PMea (dBμV/m)	Margin(dB)	Limit(dBμV/m)	Polarity
4928.9	30.7	-3	33.7	23.30	54.00	V
7383.2	36.82	-2	38.82	17.18	54.00	H
9855.5	33.45	-1	34.45	20.55	54.00	H

6.10. AC Powerline Conducted Emission

Specifications:	FCC 47 Part 15.207, RSS-GEN 8.8
DUT Serial Number:	25B02W000005#S07
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Method of Measurement: ANSI C63.10-2013-clause 6.2

1.The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2.If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3.The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

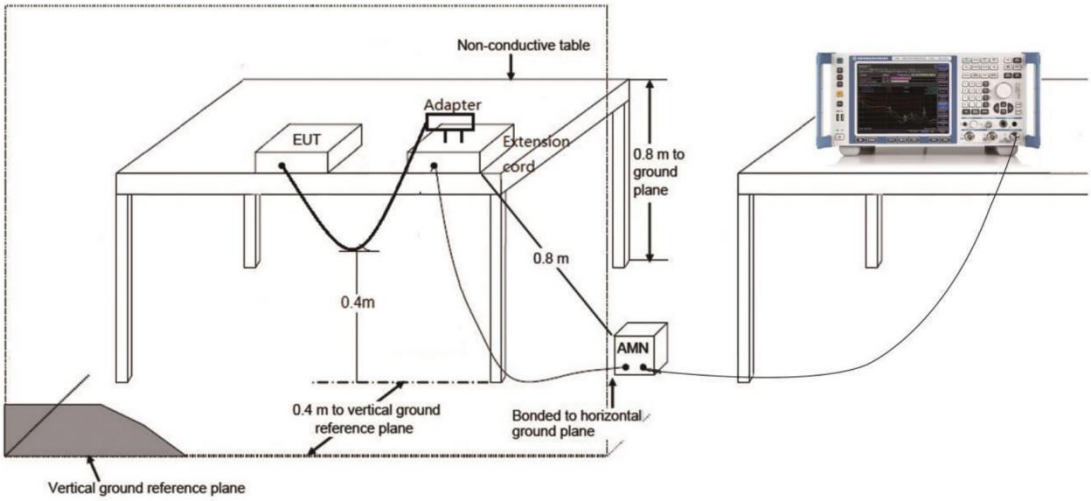
4.If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Measurement Uncertainty:

Measurement Uncertainty	1.97dB（k=2）

Test Setup



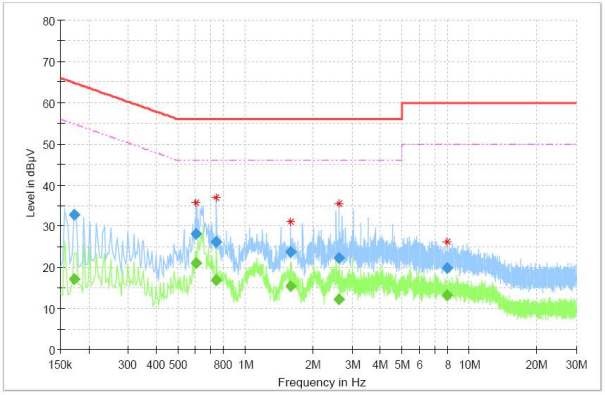
Test Condition

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

(Quasi-peak-average Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	56 to 46	P
0.5 to 5	56	46	
5 to 30	60	50	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.			

11G CH2437	/
	/

Frequency (MHz)	QuasiPeak (dBµV)	Average (dµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.172388	---	17.23	54.85	37.61	15000.0	9.000	N	ON	10.1
0.172388	32.72	---	64.85	32.13	15000.0	9.000	N	ON	10.1
0.605213	28.10	---	56.00	27.90	15000.0	9.000	L1	ON	10.0
0.605213	---	21.00	46.00	25.00	15000.0	9.000	L1	ON	10.0
0.743269	26.08	---	56.00	29.92	15000.0	9.000	N	ON	10.1
0.743269	---	16.99	46.00	29.01	15000.0	9.000	N	ON	10.1
1.593994	23.82	---	56.00	32.18	15000.0	9.000	L1	ON	9.9
1.593994	---	15.37	46.00	30.63	15000.0	9.000	L1	ON	9.9
2.623819	22.37	---	56.00	33.63	15000.0	9.000	L1	ON	9.8
2.623819	---	12.34	46.00	33.66	15000.0	9.000	L1	ON	9.8
7.959506	---	13.16	50.00	36.84	15000.0	9.000	N	ON	9.8
7.959506	19.72	---	60.00	40.28	15000.0	9.000	N	ON	9.8

Note:

1. All modes have been tested and only the worst mode is recorded in the report.
2. L1 and N is all have been tested, the result of them is synthesized in the above data diagram.

ANNEX A EUT Photos

See the document ”25B02W000005-External Photos”.
See the document ”25B02W000005-Internal Photos”.

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

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