

FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

IAdea Corporation

Digital Signage Media Appliance

Model No.: IAD-16005E

FCC ID: Y9E-IAD16005E

Prepared for : IAdea Corporation
3F, No. 21, Lane 168, Xingshan Road, Neihu Dist. Taipei, 114
Taiwan

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Kefeng Road, Science & Technology Park,
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Date of Test : May.30~Jun.08, 2022
Date of Report : Jul.18, 2022

TABLE OF CONTENTS

Description	Page
1. SUMMARY OF STANDARDS AND RESULTS	5
1.1. Description of Standards and Results	5
2. GENERAL INFORMATION.....	6
2.1. Description of Equipment Under Test	6
2.2. Feature of Equipment Under Test	7
2.3. Tested Supporting System Details	8
2.4. Block diagram of connection between the EUT and simulators	8
2.5. Test Information.....	8
2.6. Test Facility.....	9
2.7. Measurement Uncertainty (95% confidence levels, k=2)	9
3. POWER LINE CONDUCTED EMISSION TEST	10
3.1. Test Equipments.....	10
3.2. Block Diagram of Test Setup	10
3.3. Power Line Conducted Emission Test Limits.....	10
3.4. Configuration of EUT on Test	11
3.5. Operating Condition of EUT	11
3.6. Test Procedure.....	11
3.7. Power Line Conducted Emission Test Results	11
4. RADIATED EMISSION TEST	13
4.1. Test Equipments.....	13
4.2. Block Diagram of Test Setup	14
4.3. Radiated Emission Limits	15
4.4. EUT Configuration on Test.....	16
4.5. Operating Condition of EUT	16
4.6. Test Procedure.....	16
4.7. Radiated Emission Test Results	17
5. CONDUCTED SPURIOUS EMISSIONS	34
5.1. Test Equipments.....	34
5.2. Limit.....	34
5.3. Test Procedure.....	34
5.4. Test result	34
6. BAND EDGE COMPLIANCE TEST.....	44
6.1. Test Equipments.....	44
6.2. Limit	44
6.3. Test Procedure	44
6.4. Test Results	44
7. 6dB Bandwidth Test	69
7.1. Test Equipments.....	69
7.2. Limit	69
7.3. Test Procedure.....	69
7.4. Test Results	69
8. OUTPUT POWER TEST	72
8.1. Test Equipments.....	72
8.2. Limit (FCC Part 15C 15.247 b(3)).....	72
8.3. Test Procedure.....	72
8.4. Test Results	73

9. POWER SPECTRAL DENSITY TEST76

9.1. Test Equipments..... 76

9.2. Limit 76

9.3. Test Procedure..... 76

9.4. Test Results 77

10. ANTENNA REQUIREMENT80

10.1. Standard Applicable 80

10.2. Antenna Connected Construction 80

11. DEVIATION TO TEST SPECIFICATIONS1

Appendix A. Photograph of Test

Appendix B. Photo of the EUT

TEST REPORT

Applicant : IAdea Corporation
Manufacturer : IAdea Corporation
Product : Digital Signage Media Appliance
FCC ID : Y9E-IAD16005E
(A) Model No. : IAD-16005E
(B) Test Voltage : DC 12V From Adapter Input AC 120V/60Hz

Tested for comply with:
FCC CFR 47 Part 15 Subpart C

Test procedure used:
ANSI C63.10: 2020
KDB 558074 D01v05

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to single evaluation of one sample of above mentioned product and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd..

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

Date of Test : May.30~Jun.08, 2022 Report of date: Jul.18, 2022

Prepared by : Mia Zhao Reviewed by : Sunny Lu
Mia Zhao/ Assistant Sunny Lu / Manager



Approved & Authorized Signature:

David Jin

David Jin / Deputy General Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission	FCC Part 15: 15.207	PASS
Radiated Emission	FCC Part 15: 15.209 FCC Part 15: 15.205	PASS
Band Edge Compliance	FCC Part 15: 15.247(d)	PASS
Conducted spurious emissions	FCC Part 15: 15.247(d)	PASS
6dB Bandwidth	FCC Part 15: 15.247(a)(2)	PASS
Peak Output Power	FCC Part 15: 15.247(b)(3)	PASS
Power Spectral Density	FCC Part 15: 15.247(e)	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
Note: Measurement uncertainty affection to the result is considered, the EUT is technically compliant with standard requirements.		

2. GENERAL INFORMATION

2.1. Description of Equipment Under Test

Applicant	IAdea Corporation
Applicant Address	3F, No. 21, Lane 168, Xingshan Road, Neihu Dist. Taipei, 114 Taiwan
Manufacturer	IAdea Corporation
Manufacturer Address	3F, No. 21, Lane 168, Xingshan Road, Neihu Dist. Taipei, 114 Taiwan
Product	Digital Signage Media Appliance
Model No.	IAD-16005E
FCC ID	Y9E-IAD16005E
Adapter	Manufacturer: Channel Well Technology M/N: 2AAJ018FC Input: 100-240V~50/60Hz, 0.6A Output: DC 12.0V, 1.5A, 18.0W DC Cable: Unshielded, Detachable, 1.8m
Sample Type	Prototype production
Date of Receipt	May.27,2022
Date of Test	May.30~Jun.08, 2022
Remark: This report only for WIFI 2.4GHz.	

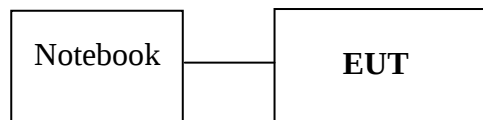
2.2.Feature of Equipment Under Test

Product Feature & Specification		
Product	Digital Signage Media Appliance	
Model No.	IAD-16005E	
Radio	IEEE802.11 a/b/g/n/ac	
Power Source	☒ Commercial Power	AC 100 ~ 240V
	☒ External Power Source	DC 12V
	☐ Lithium battery	DC V, mAh
	☐ UM battery	DC V
2.4GHz Wi-Fi		
Support Modes	802.11b/g/n20	
Frequency Range	2412-2462MHz	
Type of Modulation	802.11b(DSSS): CCK, QPSK, BPSK; 802.11g/n(OFDM): 64QAM,16QAM, QPSK, BPSK	
Data Rate	802.11b: 1/2/5.5/11 Mbps; 802.11g: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 150Mbps	
Channel Separation	5MHz	
5GHz Wi-Fi		
Support Modes	802.11a/n20/n40/ac20/ac40/ac80	
Frequency Range	5180-5240MHz, 5745-5825MHz	
Type of Modulation	802.11a/n (OFDM): QPSK, BPSK, 16QAM, 64QAM 802.11ac (OFDM): QPSK, BPSK, 16QAM, 64QAM,256QAM	
Data Rate	802.11a: 6/9/12/18/24/36/48/54 Mbps; 802.11n: up to 150Mbps; 802.11ac: up to 433Mbps	
Channel Separation	5MHz	
Antenna System		
Type of Antenna	External rod Antenna	
Antenna Peak Gain	Wifi 2.4G: 1.79dBi Wifi 5G Band1: 4.44dBi Wifi 5G Band4: 4.54dBi	

2.3. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number
1.	Notebook	N/A	acer	ZOW	NVX7C
	USB Cable: Shielded, Detachable, 1.0m				

2.4. Block diagram of connection between the EUT and simulators



(EUT: Digital Signage Media Appliance)

2.5. Test Information

A special test software (Ampak RFTestTool, VER: 7.0) was used to control EUT work in Continuous TX mode(The duty cycle of the test signal is 100%), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	MCS0	Low :CH1	2412
	MCS0	Middle: CH6	2437
	MCS0	High: CH11	2462
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

2.6. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Kefeng Road, Science & Technology Park,
Nanshan District , Shenzhen, Guangdong, China

EMC Lab. : Certificated by ISED, Canada
Company Number: 5183A
CAB identifier: CN0034
Valid Date: Mar.31, 2023

: Certificated by FCC, USA
Designation No.: CN5022
Valid Date: Mar.31, 2023

: Accredited by NVLAP, USA
NVLAP Code: 200372-0
Valid Date: Mar.31, 2023

2.7.Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	2.6dB(150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.4dB(30~200MHz, Polarization: H)
	3.6dB(30~200MHz, Polarization: V)
	3.0dB(200M~1GHz, Polarization: H)
	3.2dB(200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 3m chamber(1GHz-25GHz)	4.6dB(1~6GHz, Distance: 3m)
	4.8dB(6~25GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.7dB(30MHz~1000MHz)
	3.3dB(1~26.5GHz)
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Bandwidth test	83kHz
Uncertainty for DC power test	1%
Uncertainty for test site temperature and humidity	0.6℃
	3%

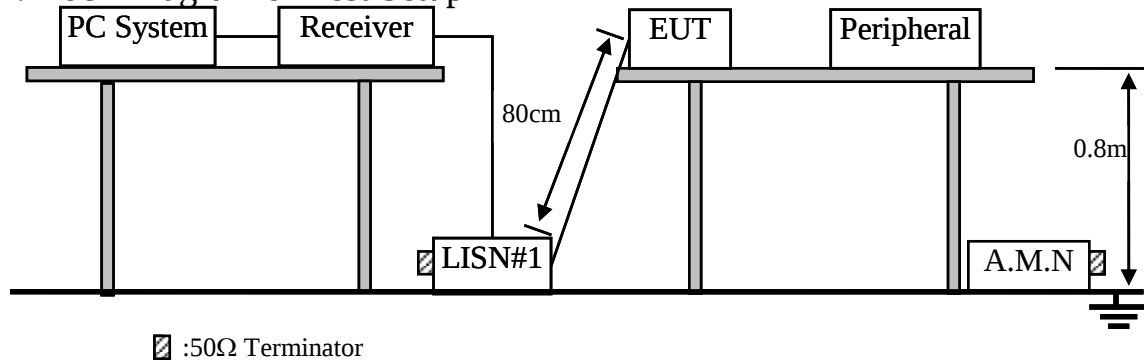
3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	May.17,18	5 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.07,22	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ENV216	102160	Oct.09,21	1 Year
4.	A.M.N	Kyoritsu	KNW-403D	8-1750-2	Apr.06,22	1 Year
5.	Terminator	Hubersuhner	50Ω	No.1	Apr.06,22	1 Year
6.	Terminator	Hubersuhner	50Ω	No.2	Apr.06,22	1 Year
7.	RF Cable	EMCI	EMCCFD300-BM-NM-2000	190422	Apr.06,22	1 Year
8.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

3.2. Block Diagram of Test Setup



□ :50Ω Terminator

3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3. Emission Level (dBμV) = Factor (L.I.S.N.) (dB) + Cable Loss (dB) + Reading (Receiver) (dBμV)

3.4.Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Digital Signage Media Appliance (EUT)

Model No. : IAD-16005E

Serial No. : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5.Operating Condition of EUT

3.5.1. Setup the EUT as shown as Section 3.2.

3.5.2. Turn on the power of EUT.

3.5.3. PC run test software to control EUT work in Tx mode.

3.6.Test Procedure

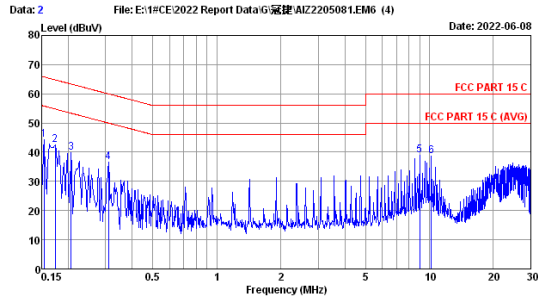
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via AC unit connected to the power mains through a line impedance stabilization network (L.I.S.N. #1). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7.Power Line Conducted Emission Test Results

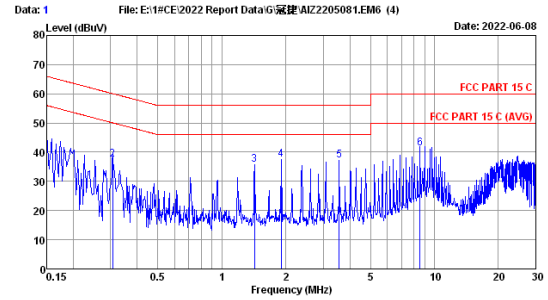
PASS. (All emissions not reported below are too low against the prescribed limits.)



Site no :1# Conduction Data No :2
 Dis./Lisn :2021 ENV216-L LISN phase:
 Limit :FCC PART 15 C
 Env./Ins. :25.1°C/54% Engineer :Evan
 Power Rating :AC 120V/50Hz
 Test Mode :WiFi2.4G Tx Mode

No	Freq (MHz)	LISN Factor (dB)	Cable loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.50	0.01	34.78	44.29	65.78	21.49	QP
2	0.174	9.50	0.01	33.07	42.58	64.77	22.19	QP
3	0.206	9.50	0.01	30.47	39.98	63.36	23.38	QP
4	0.310	9.50	0.01	27.11	36.62	59.97	23.35	QP
5	9.011	9.60	0.06	29.37	39.03	60.00	20.97	QP
6	10.233	9.60	0.06	29.02	38.68	60.00	21.32	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
 2.If the average limit is met when using a quasi-peak detector.
 the EUT shall be deemed to meet both limits and measurement
 with average detector is unnecessary.



Site no :1# Conduction Data No :1
 Dis./Lisn :2021 ENV216-N LISN phase:
 Limit :FCC PART 15 C
 Env./Ins. :25.1°C/54% Engineer :Evan
 Power Rating :AC 120V/50Hz
 Test Mode :WiFi2.4G Tx Mode

No	Freq (MHz)	LISN Factor (dB)	Cable loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.150	10.00	0.01	32.40	42.41	66.00	23.59	QP
2	0.306	10.04	0.01	27.30	37.35	60.08	22.73	QP
3	1.426	10.20	0.02	25.49	35.71	56.00	20.29	QP
4	1.898	10.20	0.03	27.12	37.35	56.00	18.65	QP
5	3.565	10.20	0.03	27.09	37.32	56.00	18.68	QP
6	8.554	10.20	0.05	31.20	41.45	60.00	18.55	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
 2.If the average limit is met when using a quasi-peak detector.
 the EUT shall be deemed to meet both limits and measurement
 with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1. Test Equipments

4.1.1. For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber(NSA)	AUDIX	N/A	N/A	May.02,22	1 Year
2.	3#Chamber(SE)	AUDIX	N/A	N/A	May.17,18	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104051	Apr.06,22	1 Year
4.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.06,22	1 Year
5.	Amplifier	HP	8447D	2944A11159	Apr.06,22	1 Year
6.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	710	Dec.13,21	1 Year
7.	NSA Cable	HUBER+SUHNER	CFD400NL-LW	No.3	Oct.09,21	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6201397223	Apr.06,22	1 Year
9.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

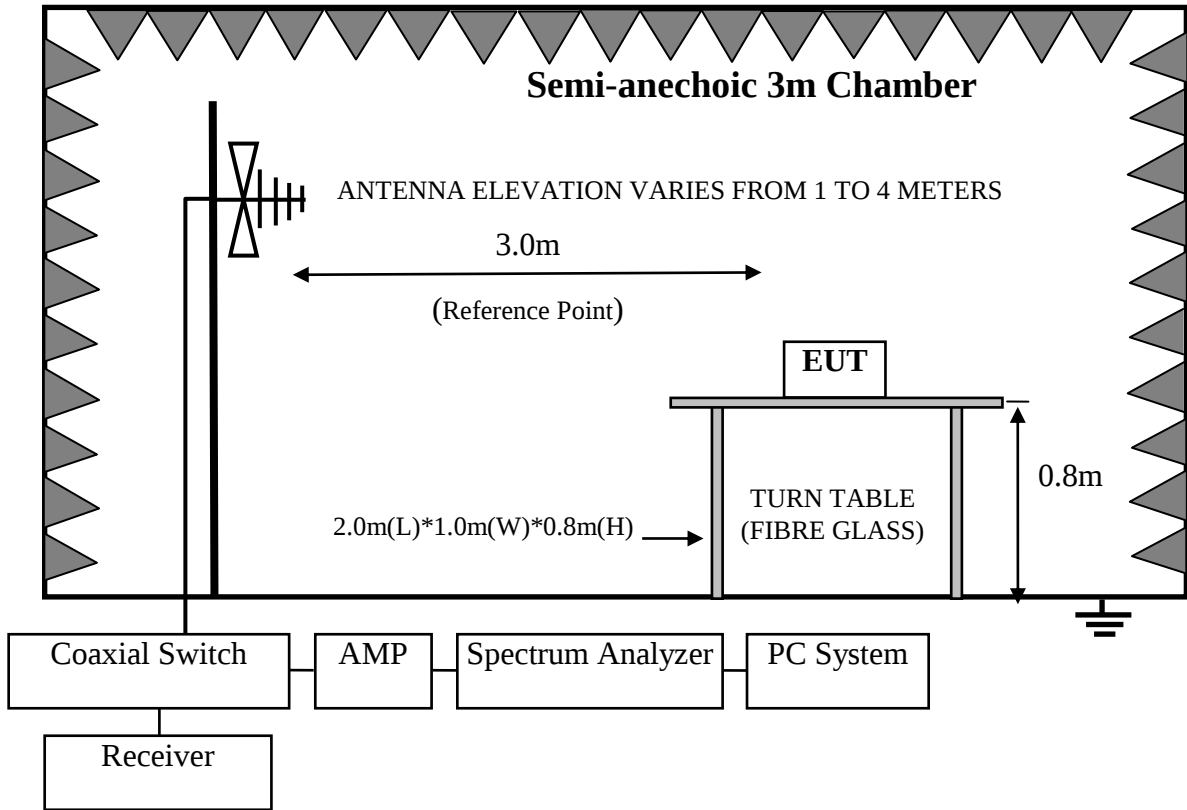
4.1.2. For frequency range 1GHz~25GHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber(Svswr)	AUDIX	N/A	N/A	Apr.14,22	1 Year
2.	3#Chamber(SE)	AUDIX	N/A	N/A	May.17,18	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104051	Apr.06,22	1 Year
4.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Jul.26,21	1 Year
5.	Amplifier	Agilent	83017A	MY53270084	Oct.09,21	1 Year
6.	RF Cable	EMCI	EMC104-SM-SM-15000	190407	Jul.14,21	1 Year
7.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

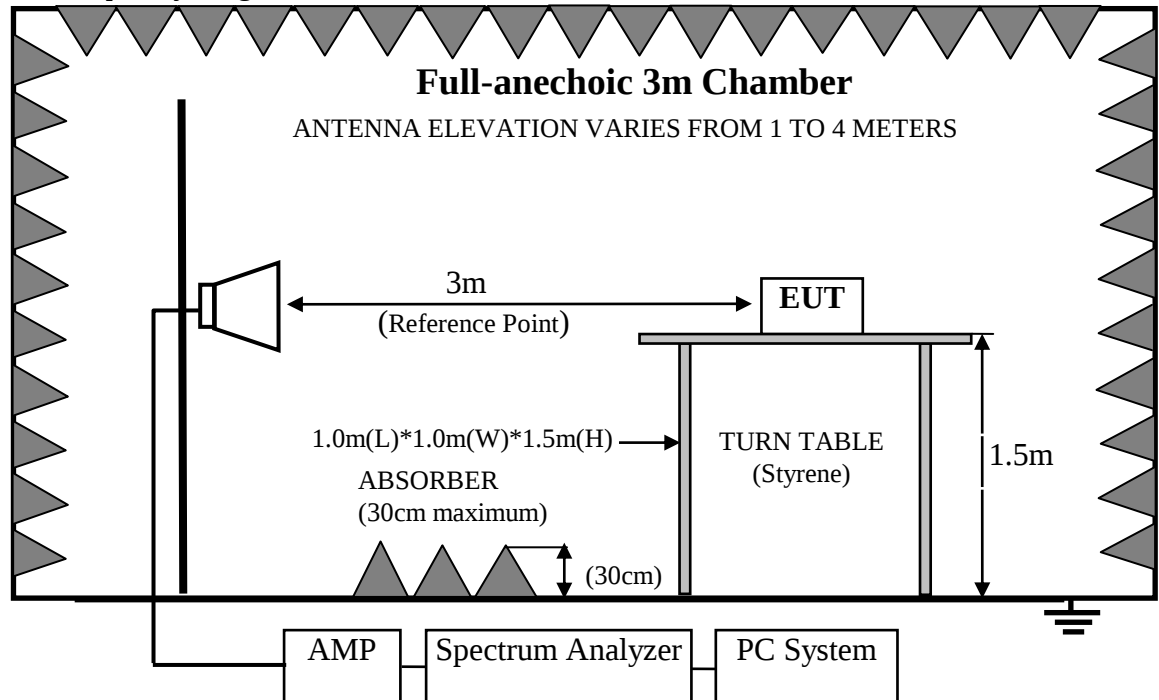
Note: N/A means Not applicable.

4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



4.3. Radiated Emission Limits

4.3.1. 15.247&209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

- Remark : (1) Emission Level (dBμV/m) = Reading (Receiver) (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB)
Emission Level (dBμV/m) = Reading (Spectrum) (dBμV) + Antenna Factor (dB/m) – Amp Factor (dB) + Cable Loss (dB)(above 1000MHz)
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.3.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

4.4.1.Digital Signage Media Appliance (EUT)

Model No. : IAD-16005E

Serial No. : N/A

4.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

4.5.Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turn on the power of all equipments.

4.5.3. Let EUT work in Tx(WiFi 2.4GHz) mode

4.6.Test Procedure

Frequency below 30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 regulation.

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)*2.4m(W)*0.3m(H) on the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horn antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

4.7. Radiated Emission Test Results

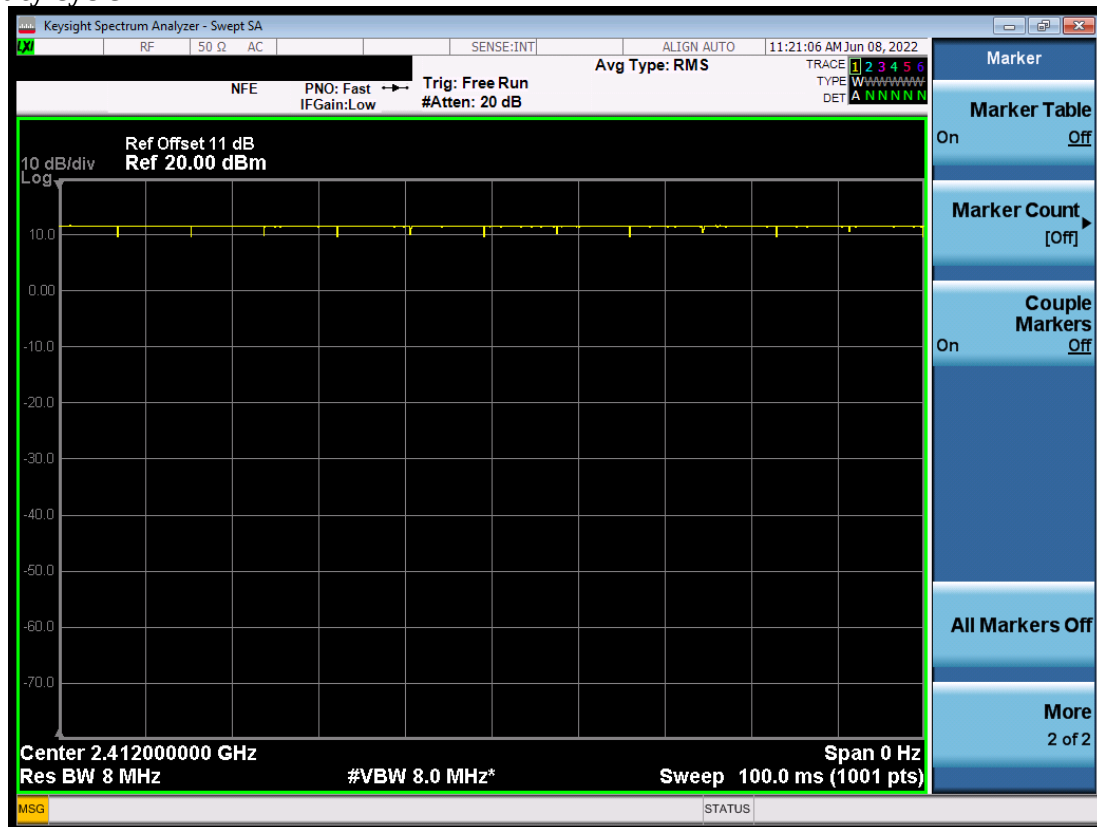
PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note 1: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

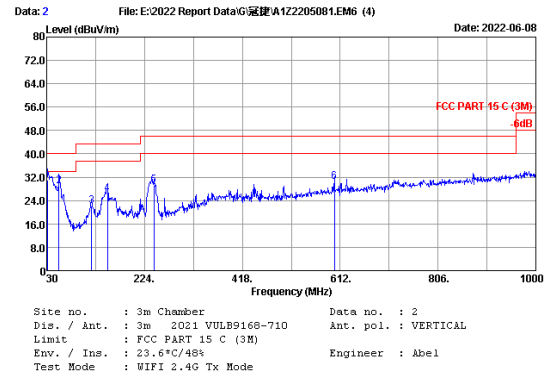
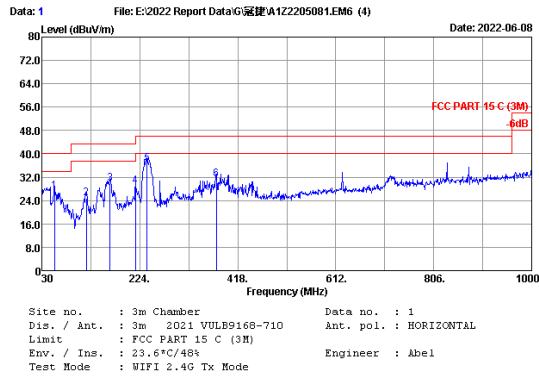
Note 2: The emissions (9kHz~30MHz) not reported for there is no emission be found.

Duty cycle



Note: The duty cycle of the test signal is $\geq 98\%$.

Frequency: 30MHz~1GHz



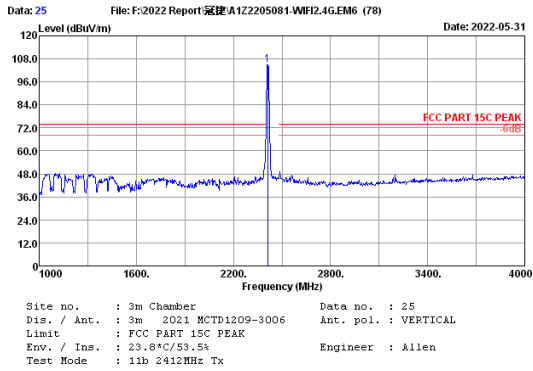
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	55.220	19.90	0.77	6.35	27.02	40.00	12.98	QP
2	118.270	16.41	1.09	7.29	24.79	43.50	18.71	QP
3	164.830	19.45	1.29	8.96	29.70	43.50	13.80	QP
4	215.270	17.47	1.49	10.10	29.06	43.50	14.44	QP
5	238.550	18.02	1.53	17.12	36.67	46.00	9.33	QP
6	375.320	21.46	1.96	7.77	31.19	46.00	14.81	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	19.10	0.66	11.16	30.92	40.00	9.08	QP
2	54.250	19.98	0.77	8.31	29.06	40.00	10.94	QP
3	119.240	16.45	1.10	4.69	22.24	43.50	21.26	QP
4	150.280	19.70	1.21	5.49	26.40	43.50	17.10	QP
5	242.430	18.12	1.54	9.57	29.23	46.00	16.77	QP
6	600.360	26.00	2.59	1.69	30.28	46.00	15.72	QP

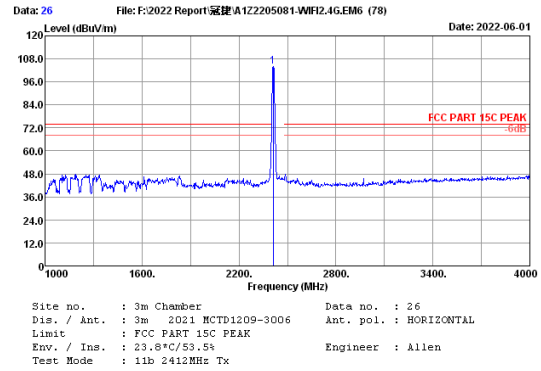
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



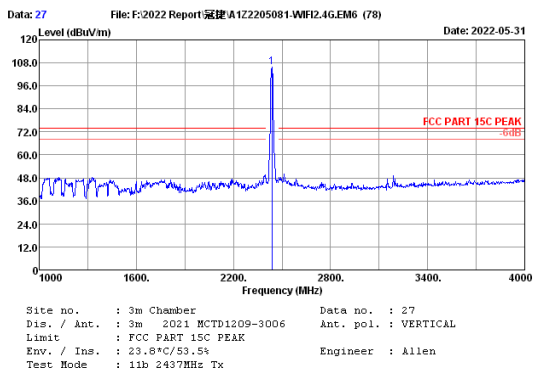
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	108.75	35.24	105.10	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



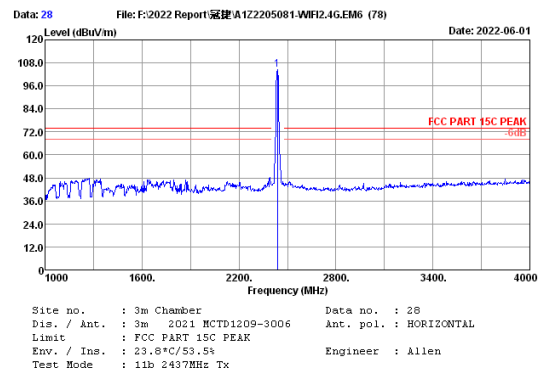
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	107.75	35.24	104.10	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



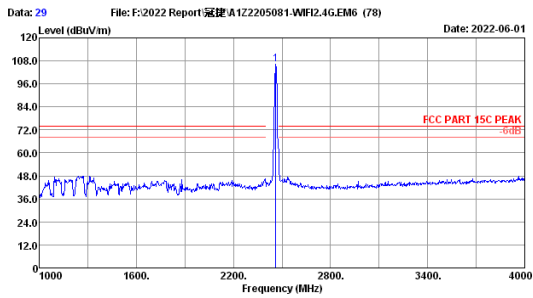
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	109.45	35.24	105.89	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	108.28	35.24	104.72	-----	-----	Peak

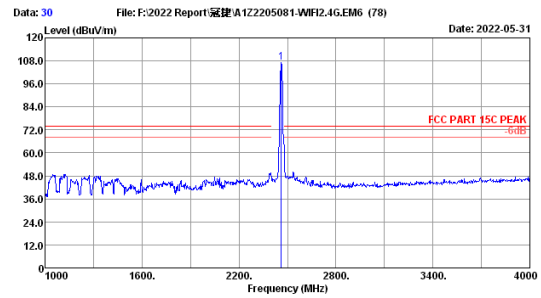
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	109.90	35.25	106.38	72.0	34.38	Peak

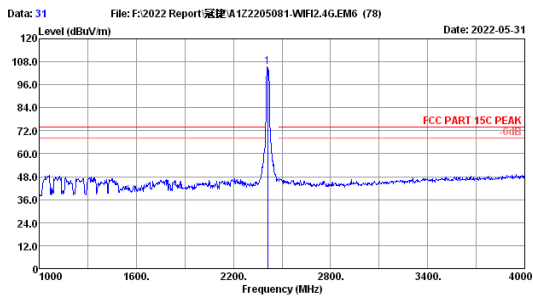
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 30
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	110.88	35.25	107.36	72.0	35.36	Peak

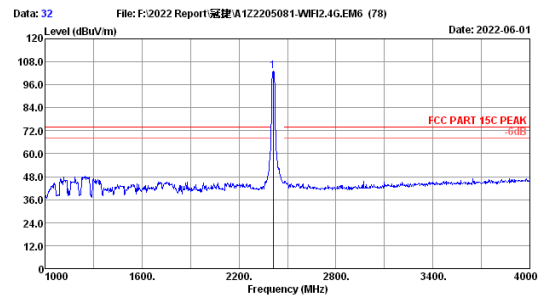
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	108.90	35.24	105.25	72.0	33.25	Peak

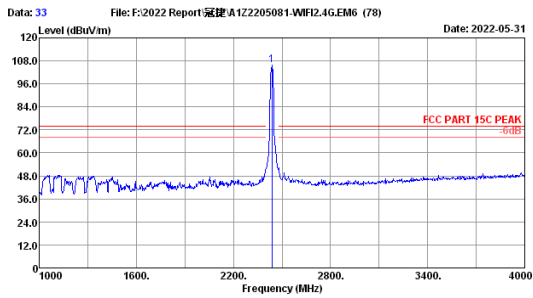
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	106.61	35.24	102.96	72.0	30.96	Peak

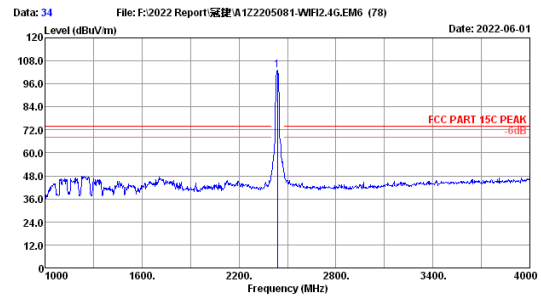
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	109.34	35.24	105.78	-----	-----	Peak

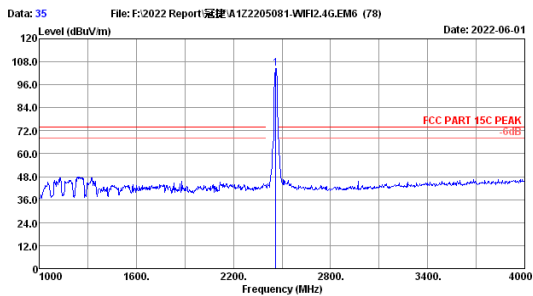
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 34
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	106.55	35.24	102.99	-----	-----	Peak

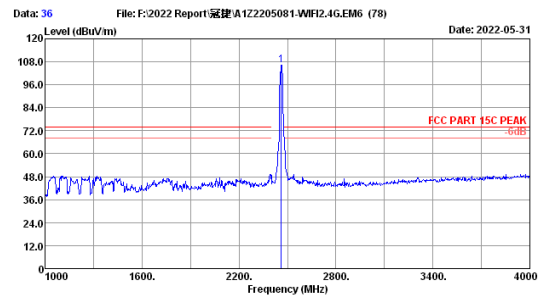
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 35
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	108.13	35.25	104.61	-----	-----	Peak

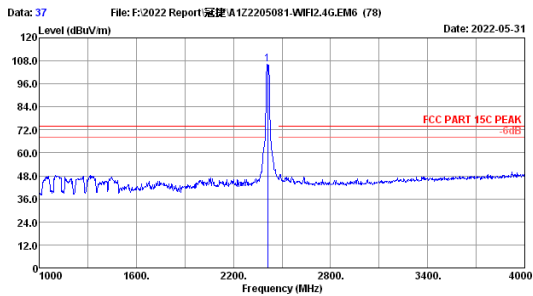
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 36
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	109.86	35.25	106.34	-----	-----	Peak

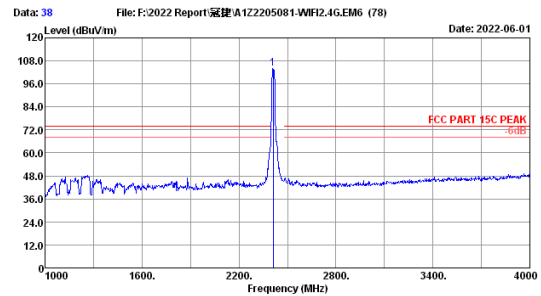
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 37
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	109.92	35.24	106.27	-----	-----	Peak

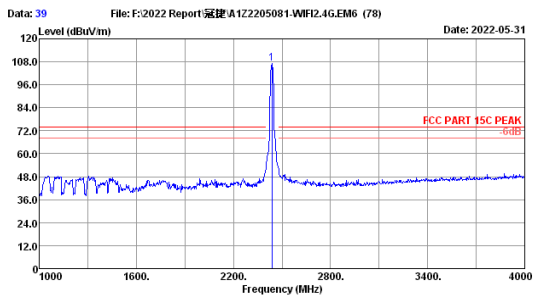
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 38
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	27.93	3.66	107.70	35.24	104.05	-----	-----	Peak

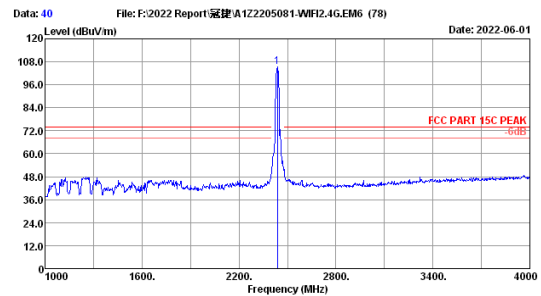
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 39
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	110.63	35.24	107.07	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

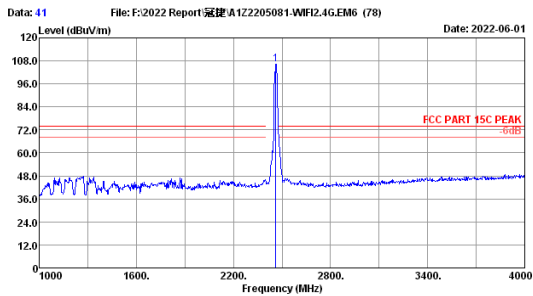


Site no. : 3m Chamber Data no. : 40
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.00	3.68	109.11	35.24	105.55	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

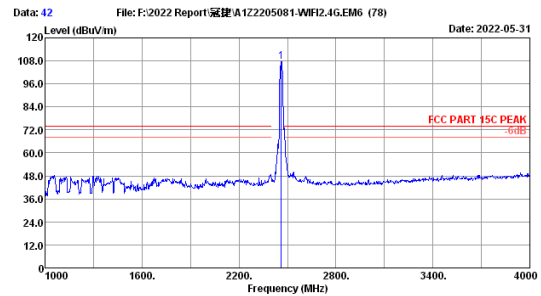
FCC ID: Y9E-IAD16005E



Site no. : 3m Chamber Data no. : 41
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	109.88	35.25	106.36	72.0	34.36	Peak

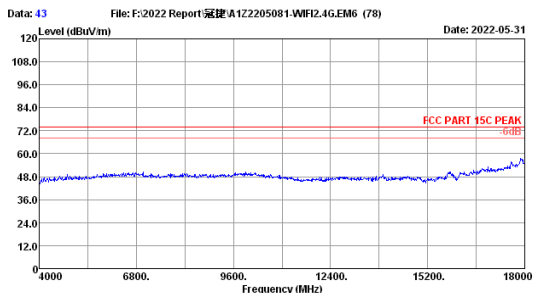
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



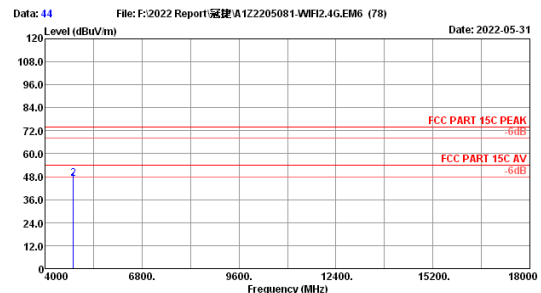
Site no. : 3m Chamber Data no. : 42
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11n20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.03	3.70	111.15	35.25	107.63	72.0	35.63	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 43
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Winter
 Test Mode : 11b 2412MHz Tx

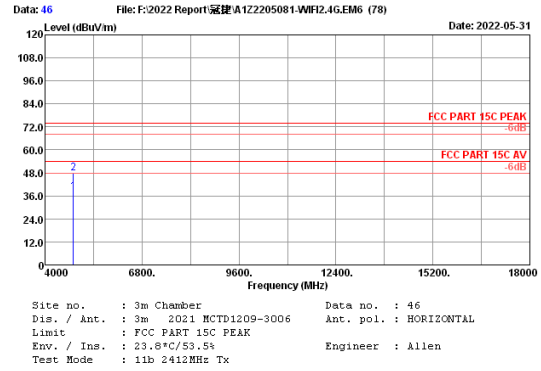
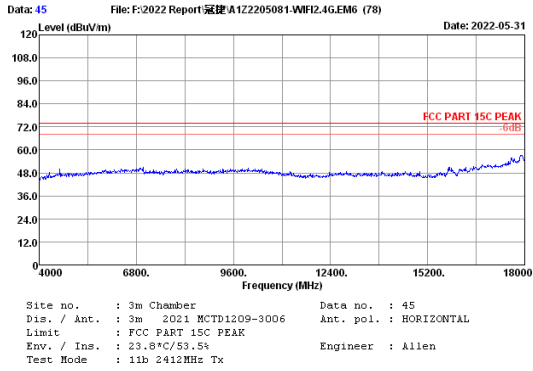


Site no. : 3m Chamber Data no. : 44
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Winter
 Test Mode : 11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	41.46	34.46	44.69	54.00	9.31	Average
2	4824.00	32.70	4.99	43.66	34.46	46.89	74.00	27.11	Peak

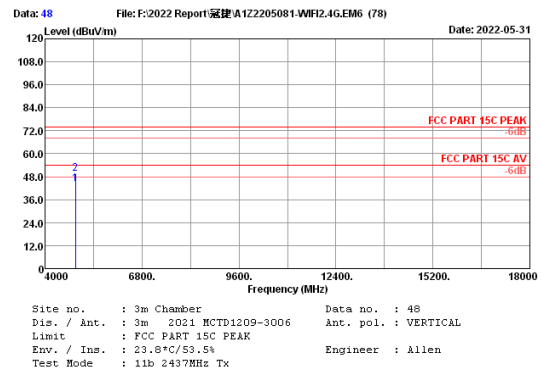
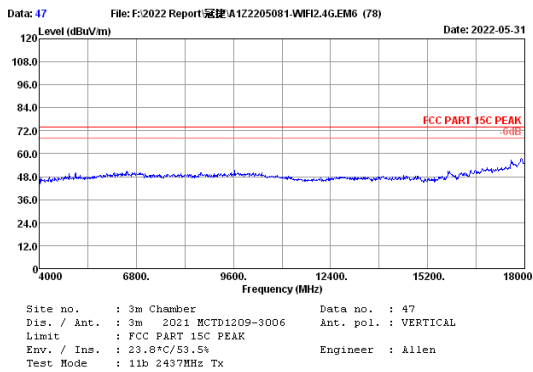
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: Y9E-IAD16005E



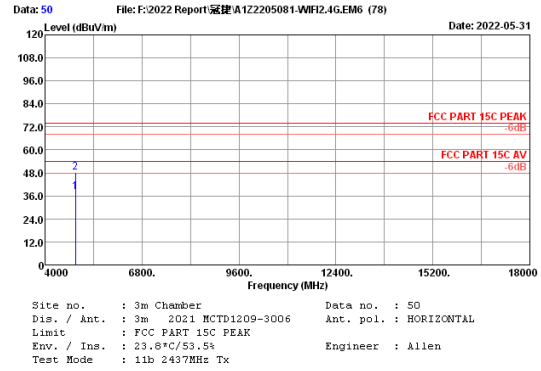
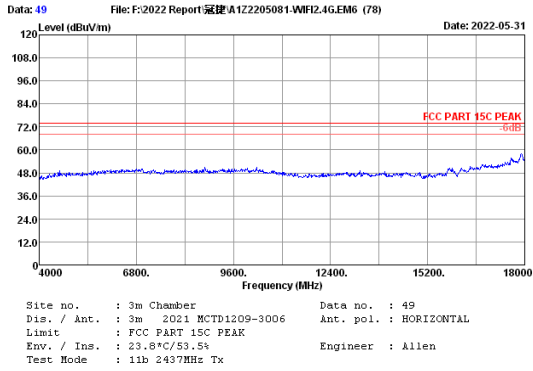
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	34.89	34.46	38.12	54.00	15.88	Average
2	4824.00	32.70	4.99	44.40	34.46	47.63	74.00	26.37	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



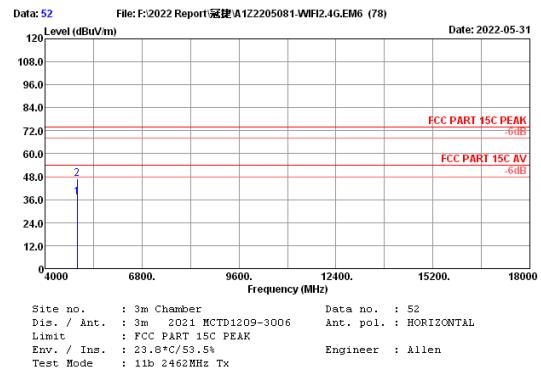
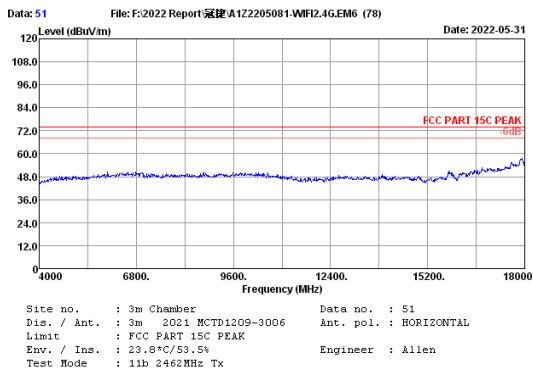
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	40.88	34.47	44.15	54.00	9.85	Average
2	4874.00	32.73	5.01	46.44	34.47	49.71	74.00	24.29	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



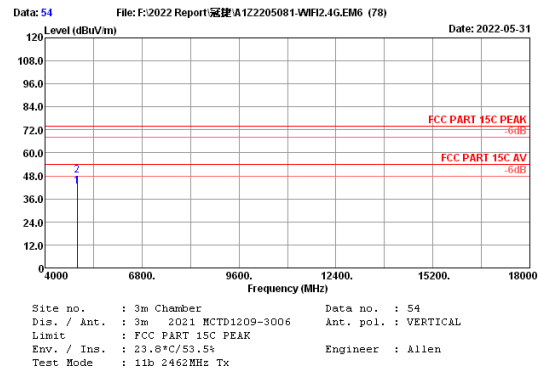
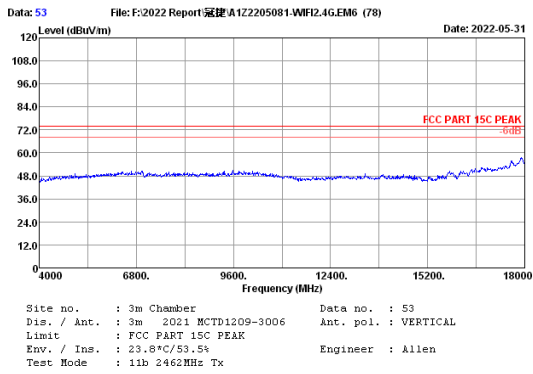
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	34.85	34.47	38.12	54.00	15.88	Average
2	4874.00	32.73	5.01	45.05	34.47	46.32	74.00	25.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



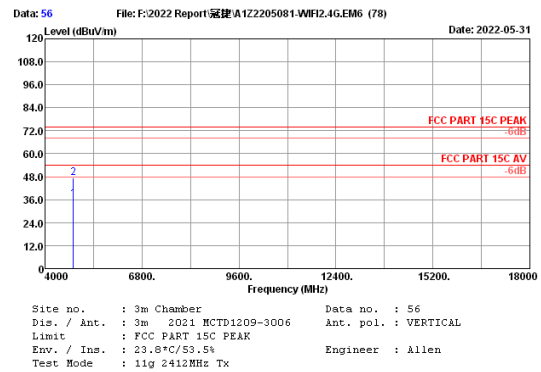
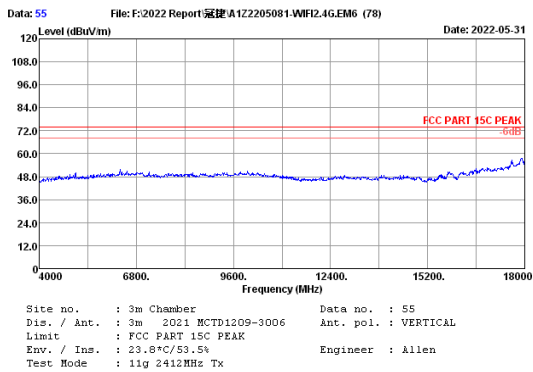
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	33.89	34.48	37.20	54.00	16.80	Average
2	4924.00	32.76	5.03	43.80	34.48	47.11	74.00	26.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



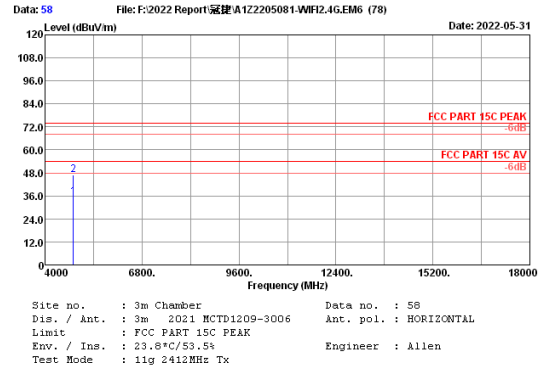
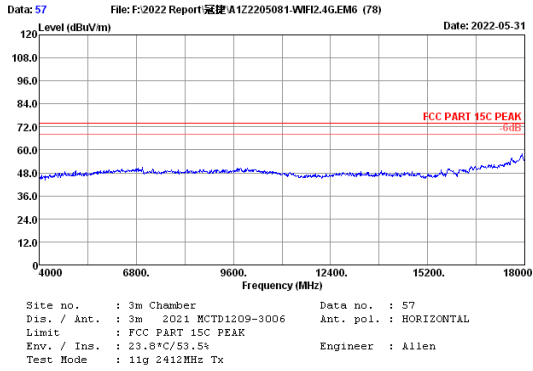
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	39.09	34.48	42.40	54.00	11.60	Average
2	4924.00	32.76	5.03	44.99	34.48	46.30	74.00	25.70	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



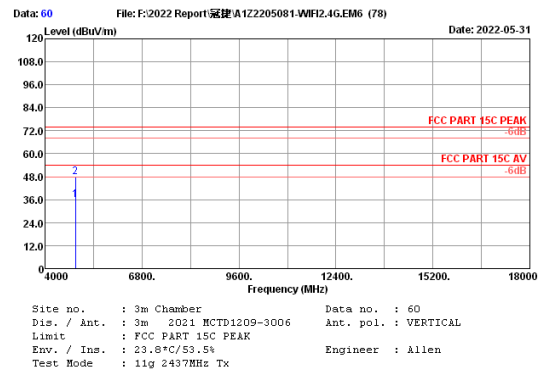
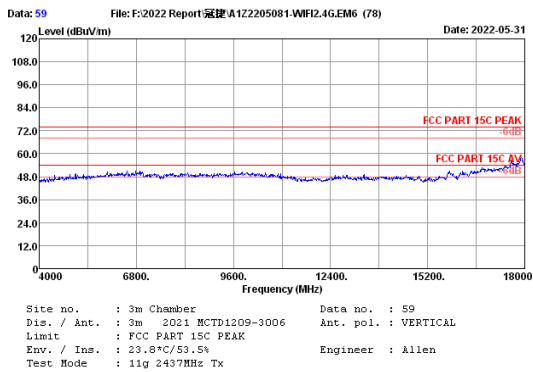
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	32.91	34.46	36.14	54.00	17.86	Average
2	4824.00	32.70	4.99	44.09	34.46	47.32	74.00	26.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



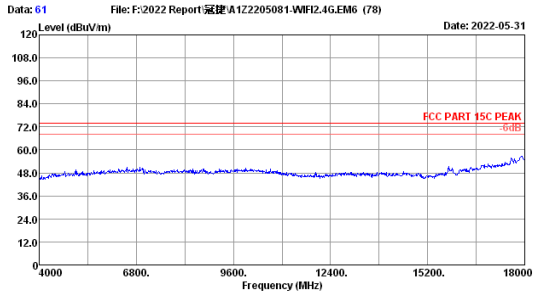
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	32.30	34.46	35.53	54.00	18.47	Average
2	4824.00	32.70	4.99	43.69	34.46	46.92	74.00	27.08	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

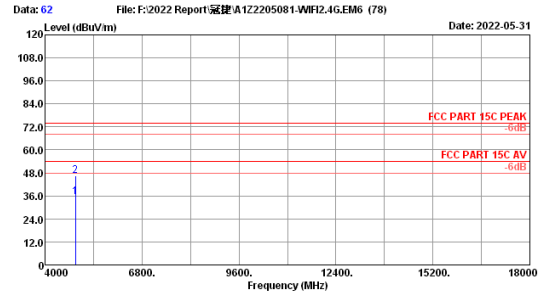


No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	32.64	34.47	35.91	54.00	18.09	Average
2	4874.00	32.73	5.01	44.63	34.47	47.90	74.00	26.10	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



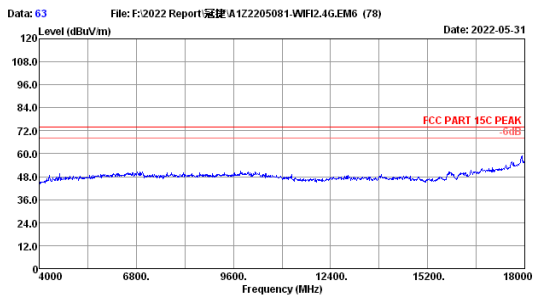
Site no. : 3m Chamber Data no. : 61
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx



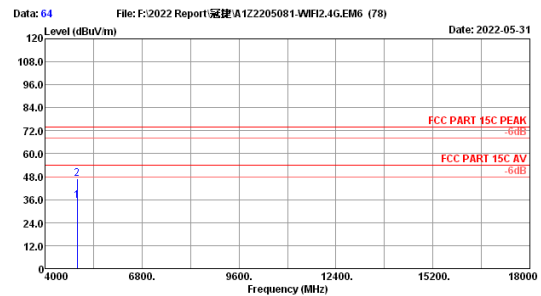
Site no. : 3m Chamber Data no. : 62
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	32.14	34.47	35.41	54.00	18.59	Average
2	4874.00	32.73	5.01	43.21	34.47	46.48	74.00	27.52	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



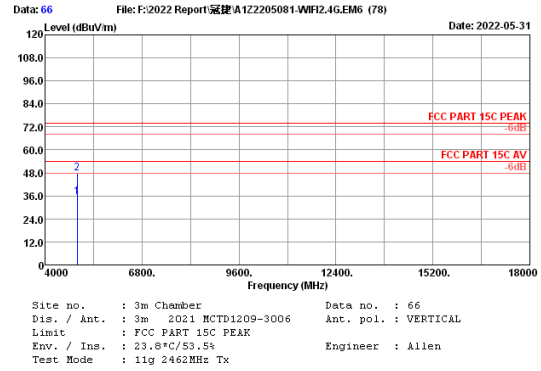
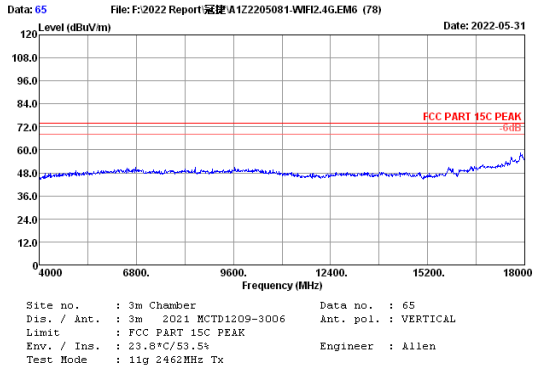
Site no. : 3m Chamber Data no. : 63
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2462MHz Tx



Site no. : 3m Chamber Data no. : 64
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2462MHz Tx

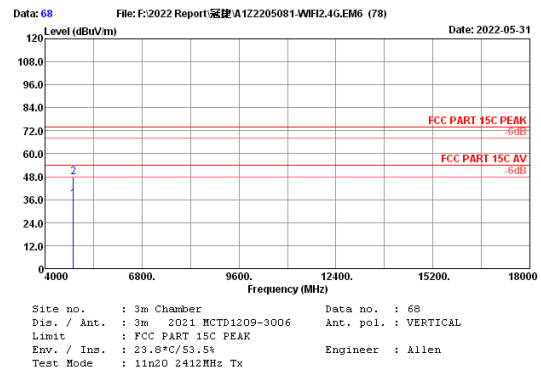
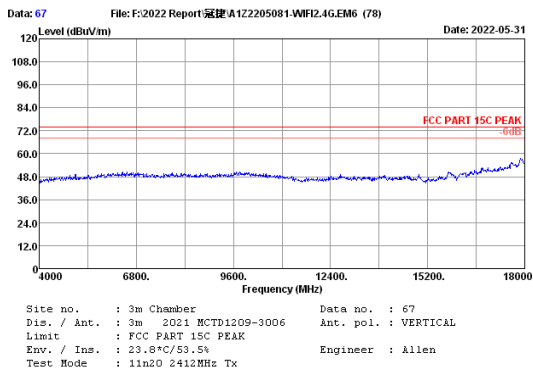
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	32.02	34.48	35.33	54.00	18.67	Average
2	4924.00	32.76	5.03	43.80	34.48	47.11	74.00	26.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	32.26	34.48	35.57	54.00	18.43	Average
2	4924.00	32.76	5.03	44.72	34.48	46.03	74.00	25.97	Peak

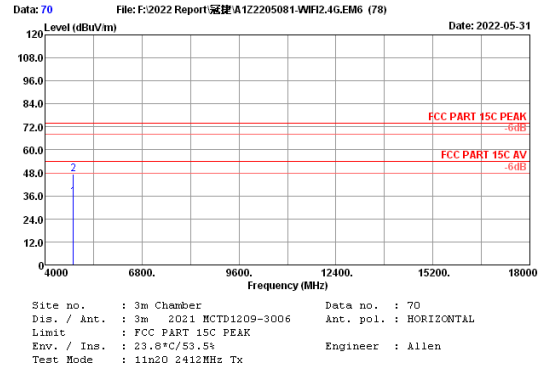
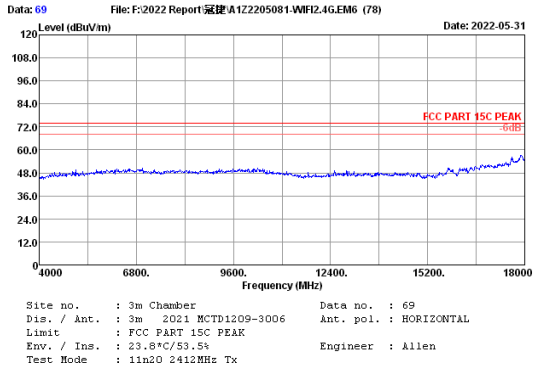
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	33.19	34.46	36.42	54.00	17.58	Average
2	4824.00	32.70	4.99	44.67	34.46	47.90	74.00	26.10	Peak

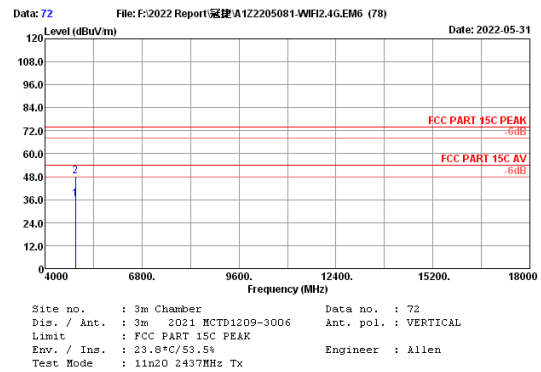
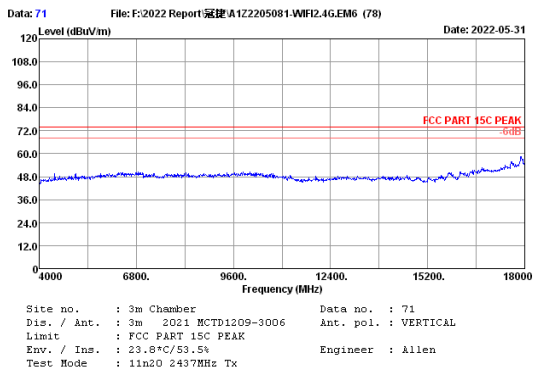
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: Y9E-IAD16005E



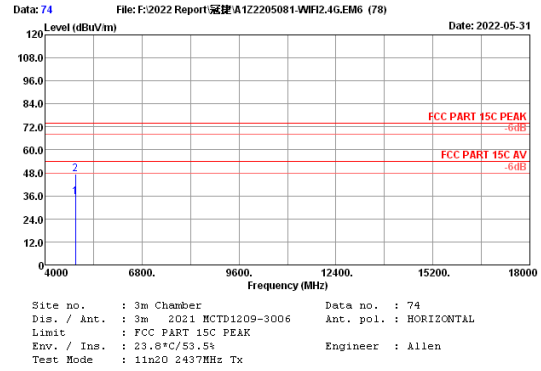
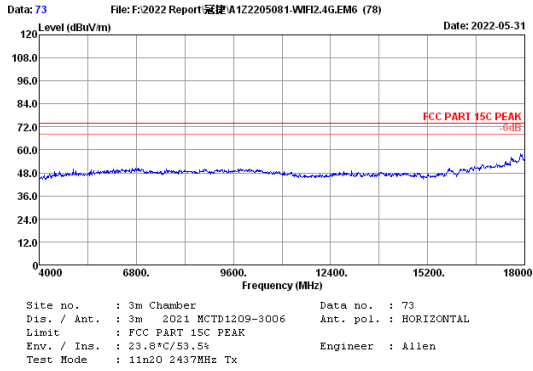
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.70	4.99	32.41	34.46	35.64	54.00	18.36	Average
2	4824.00	32.70	4.99	44.19	34.46	47.42	74.00	26.58	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



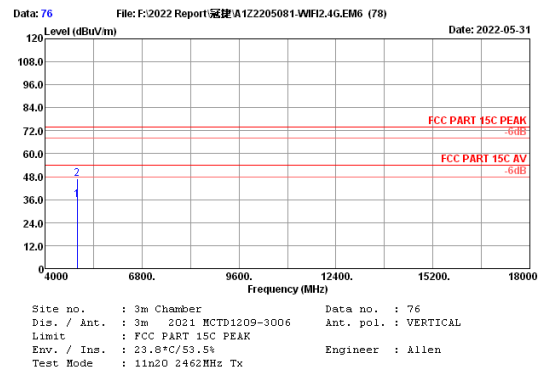
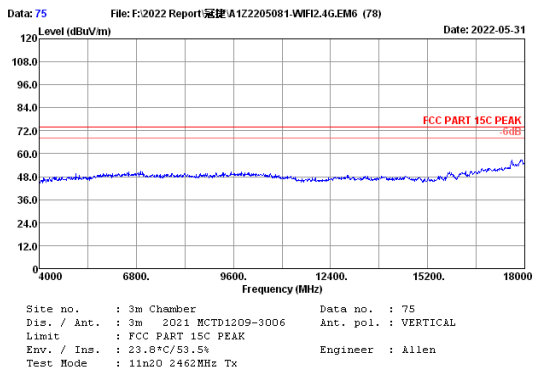
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	33.17	34.47	36.44	54.00	17.56	Average
2	4874.00	32.73	5.01	45.12	34.47	48.39	74.00	25.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	32.73	5.01	32.09	34.47	35.36	54.00	18.64	Average
2	4874.00	32.73	5.01	44.16	34.47	47.43	74.00	26.57	Peak

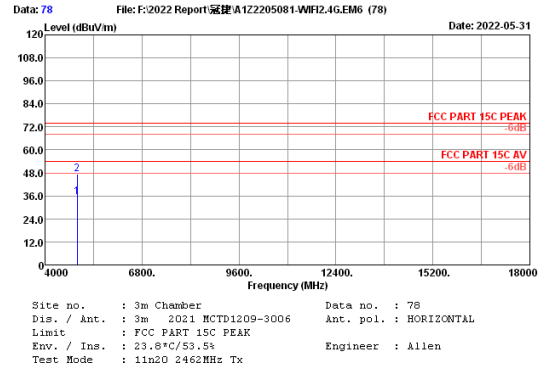
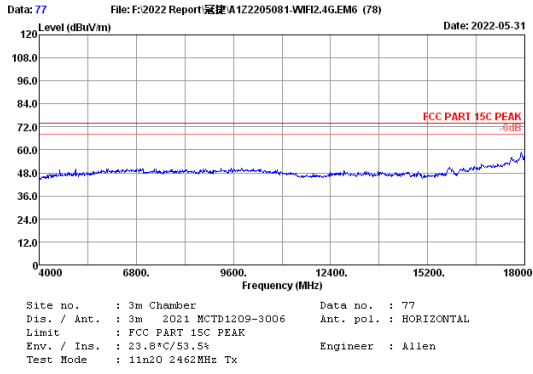
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	32.59	34.48	35.90	54.00	18.10	Average
2	4924.00	32.76	5.03	43.78	34.48	47.09	74.00	26.91	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: Y9E-IAD16005E



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	32.76	5.03	32.06	34.48	35.37	54.00	18.63	Average
2	4924.00	32.76	5.03	43.97	34.48	47.28	74.00	26.72	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,22	1 Year
2.	RF Cable	HUBER+SUHNER	SUCOFLEX-106	505238/6	Apr.06,22	1 Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30dB instead of 20dB.

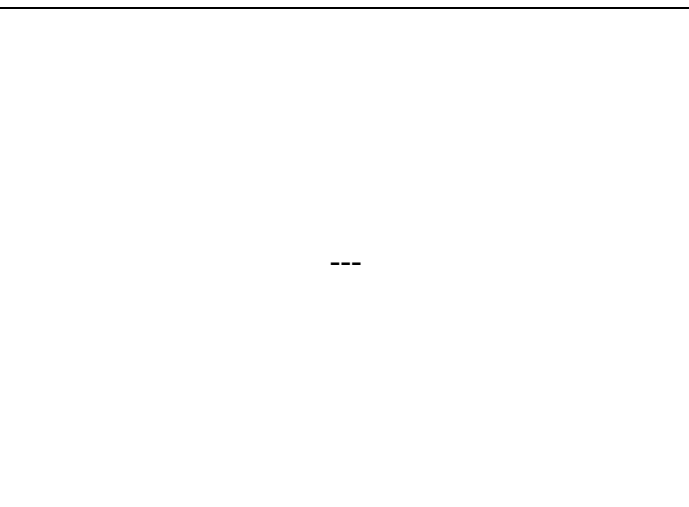
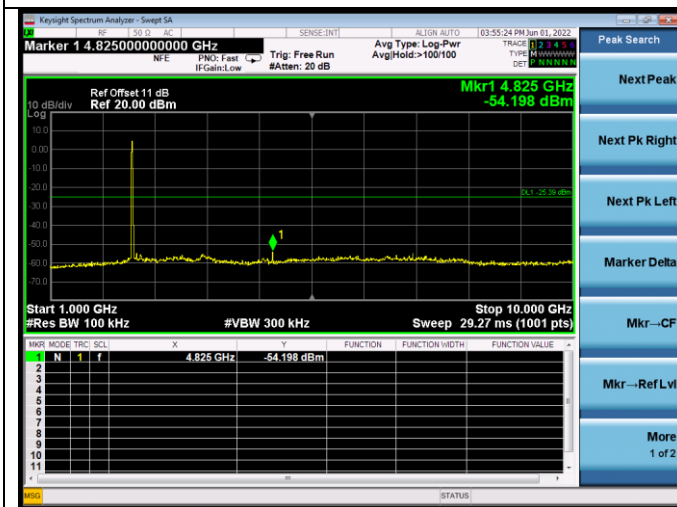
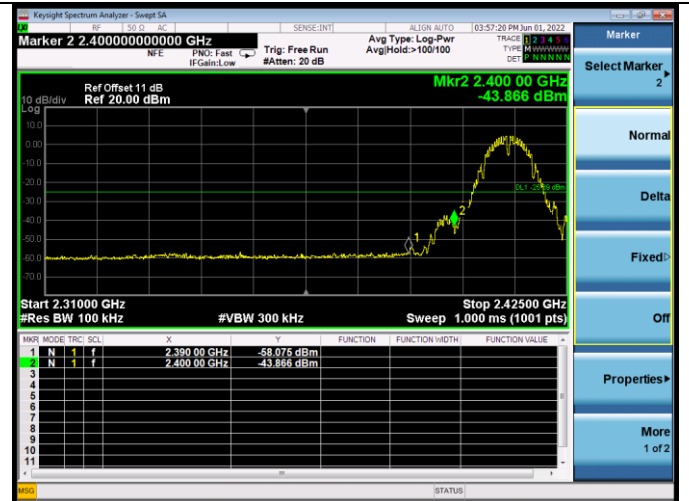
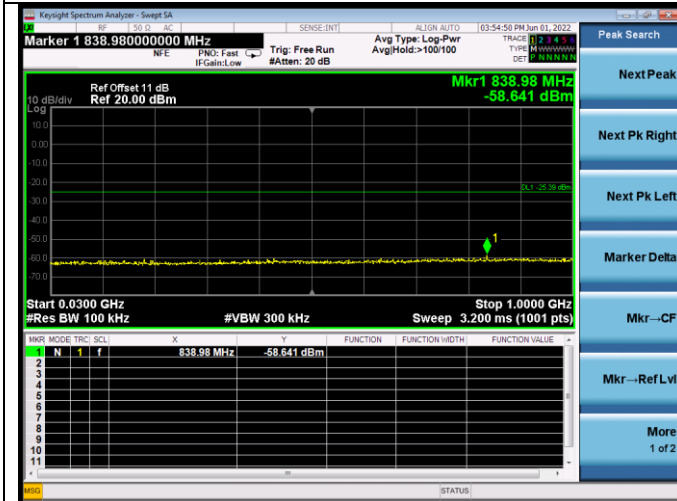
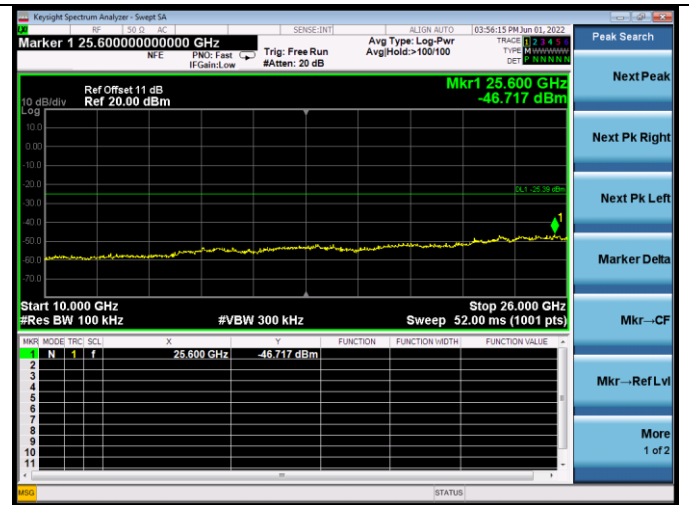
5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions with peak detector.

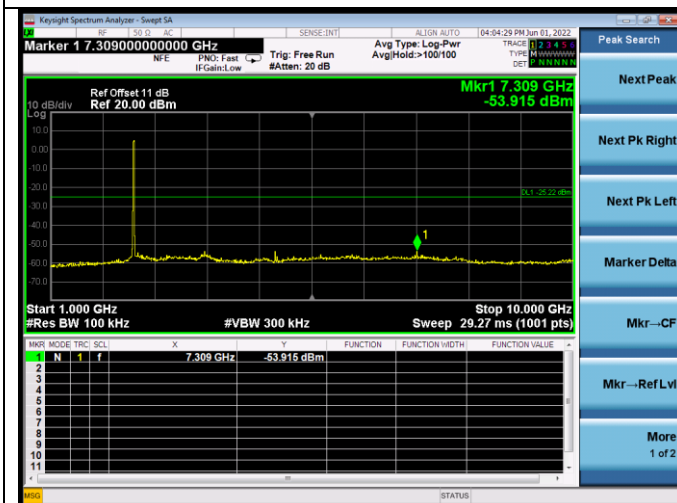
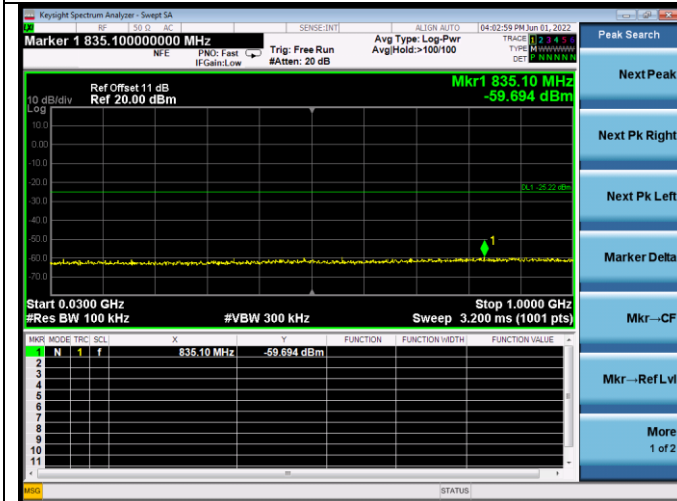
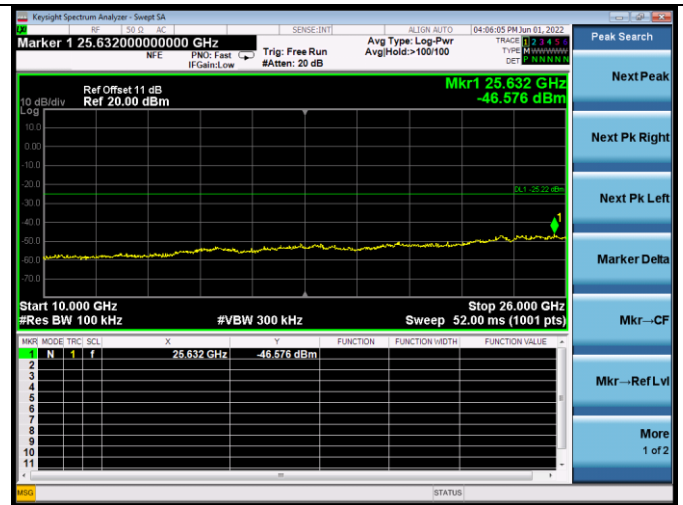
5.4.Test result

PASS (The testing data was attached in the next pages.)

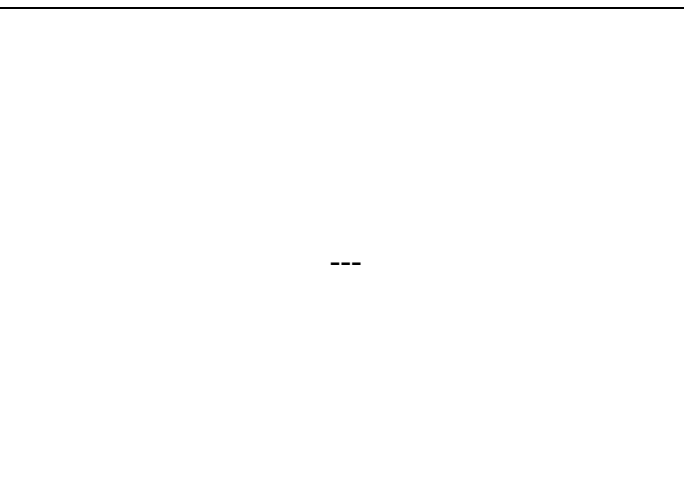
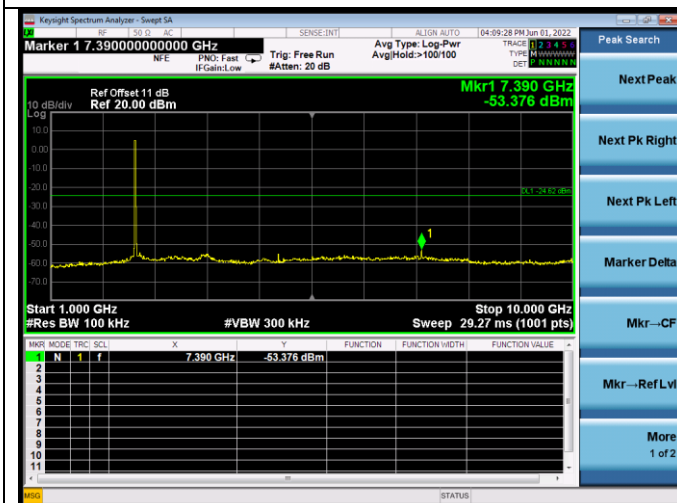
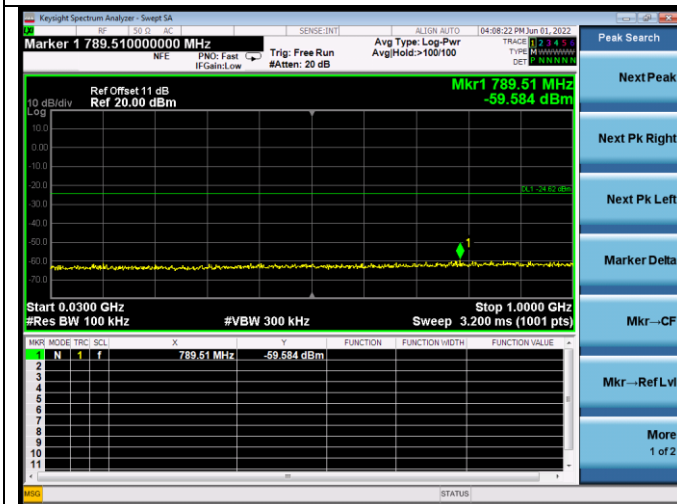
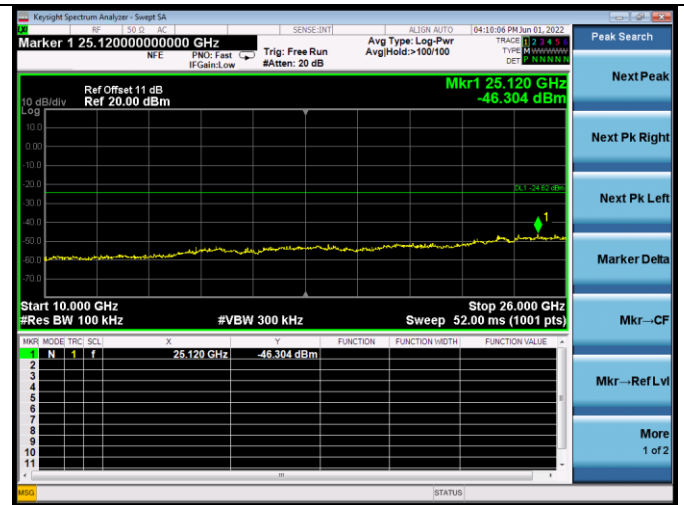
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



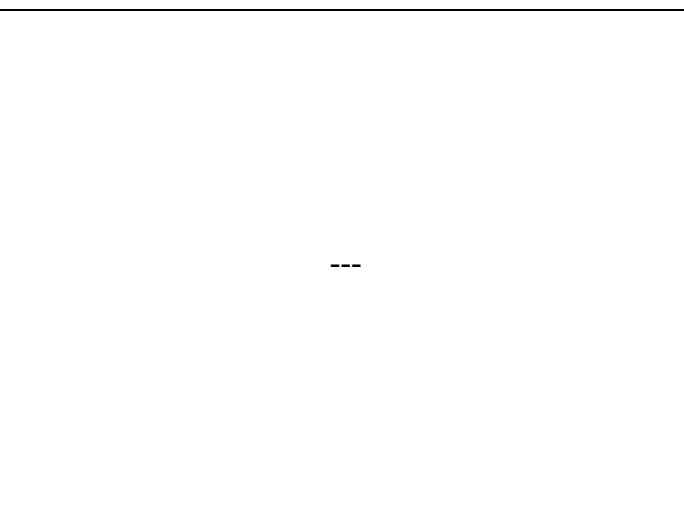
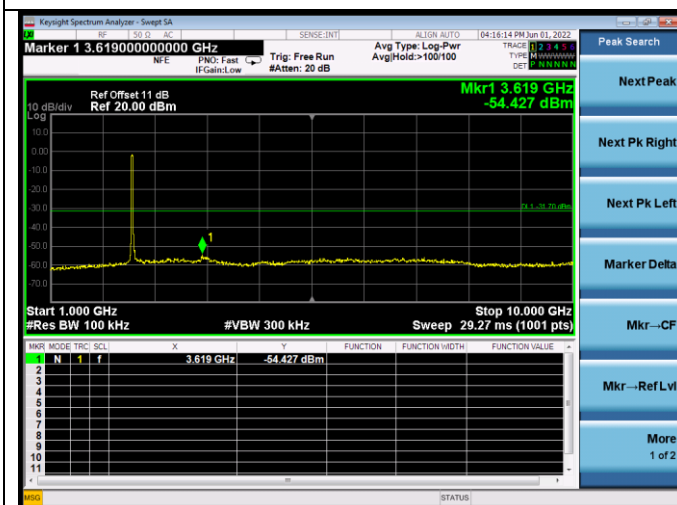
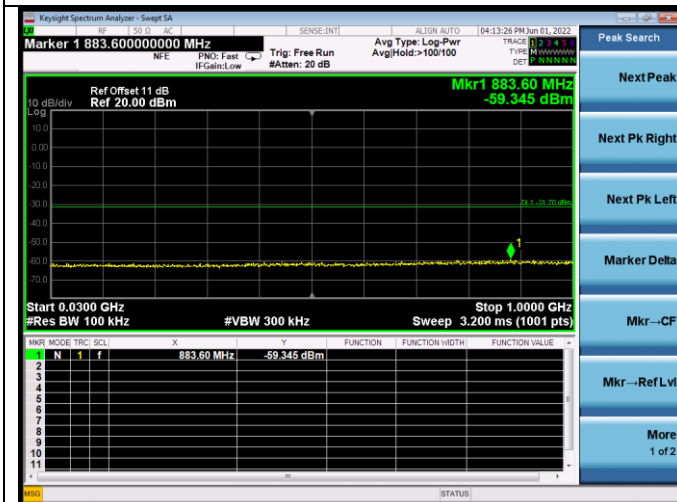
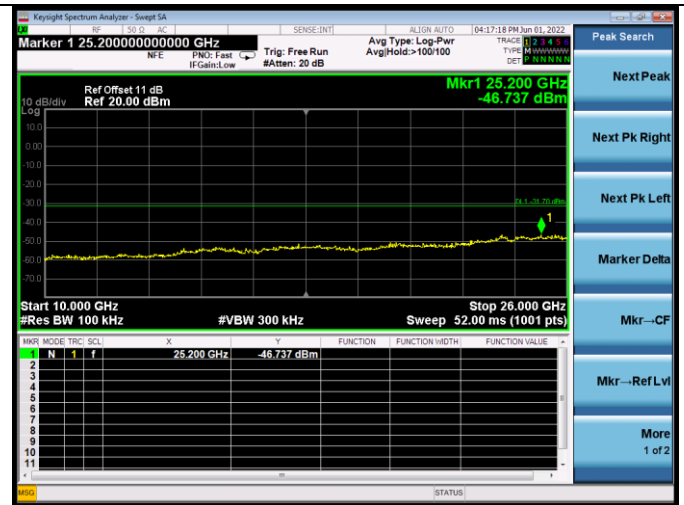
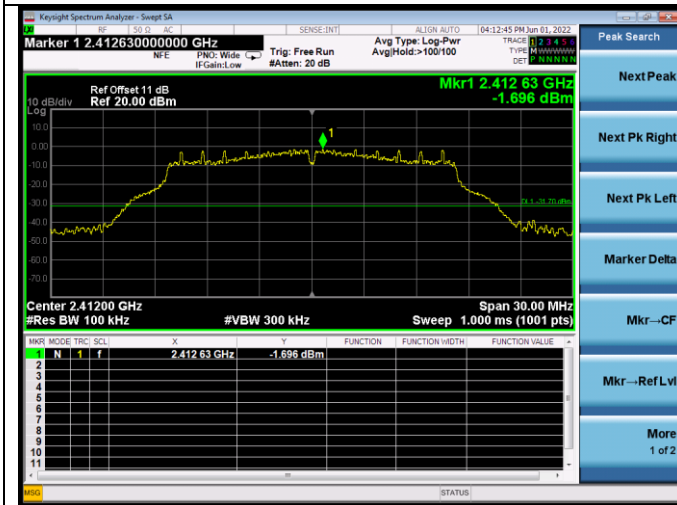
Test CH6: 2437MHz



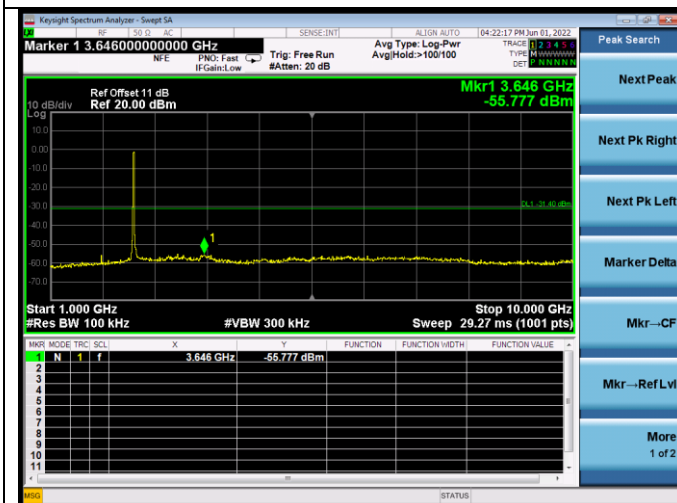
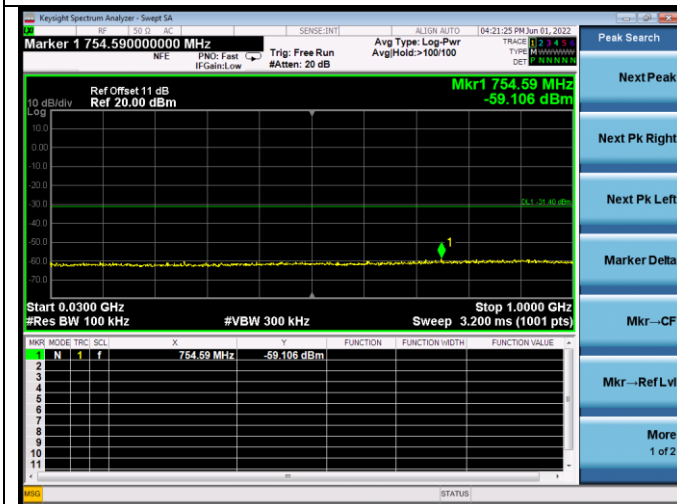
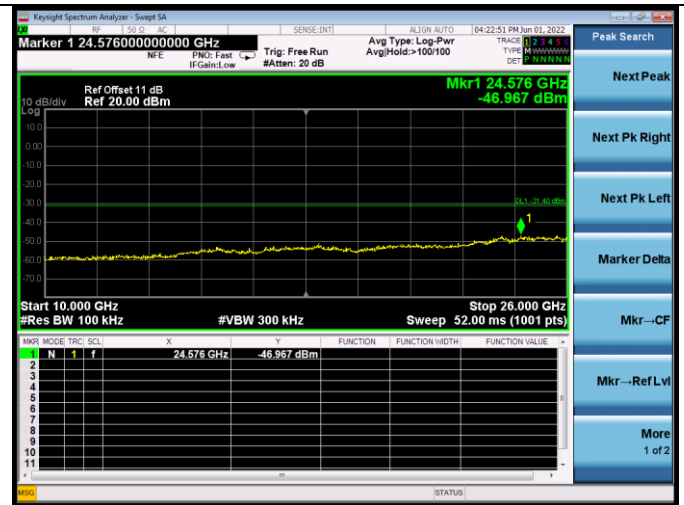
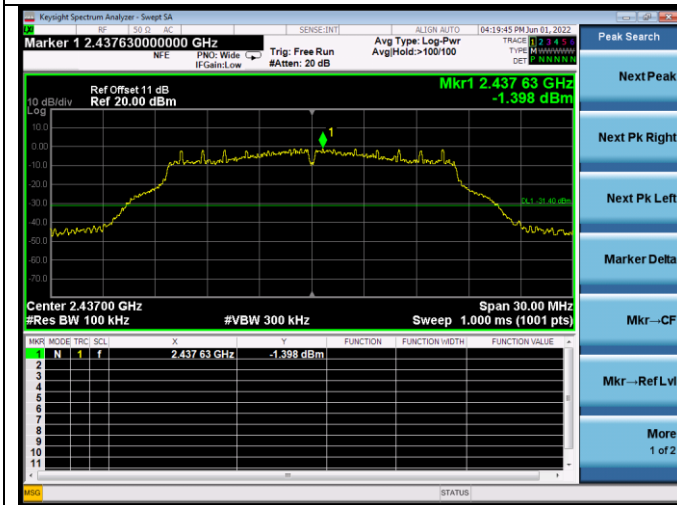
Test CH11: 2462MHz



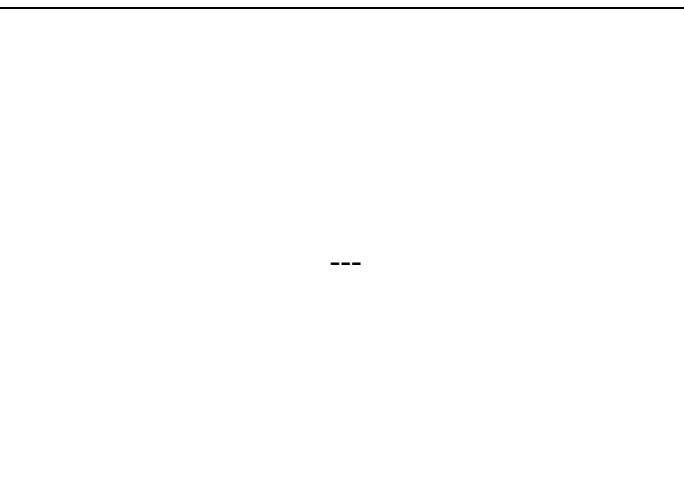
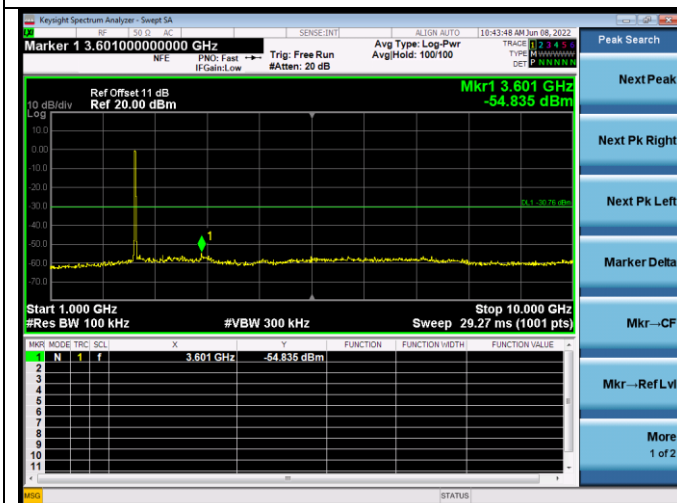
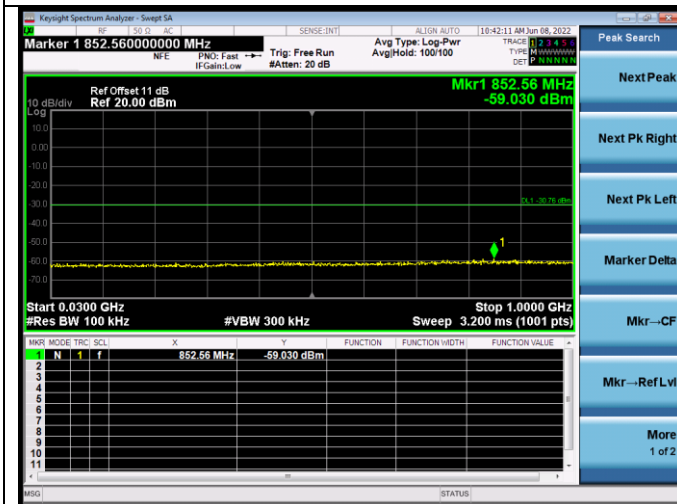
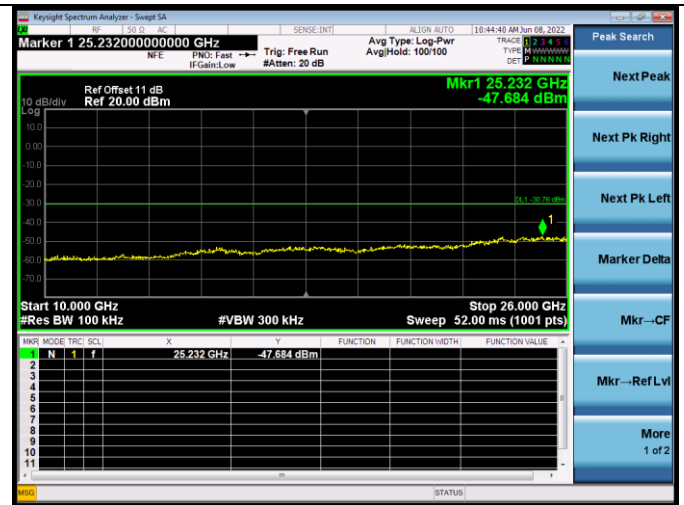
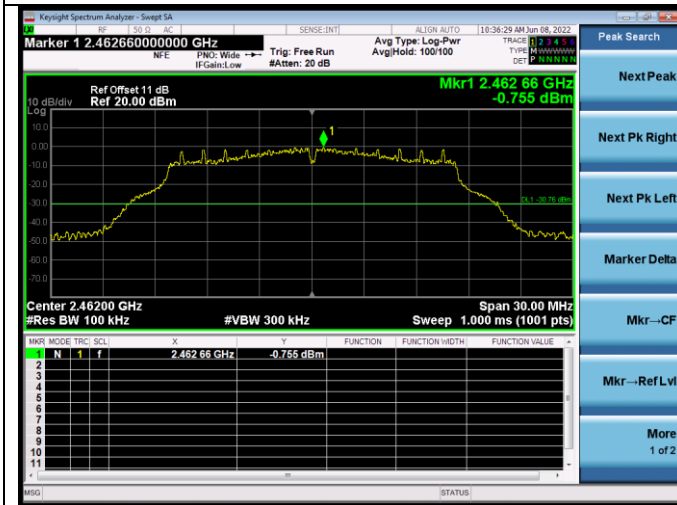
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



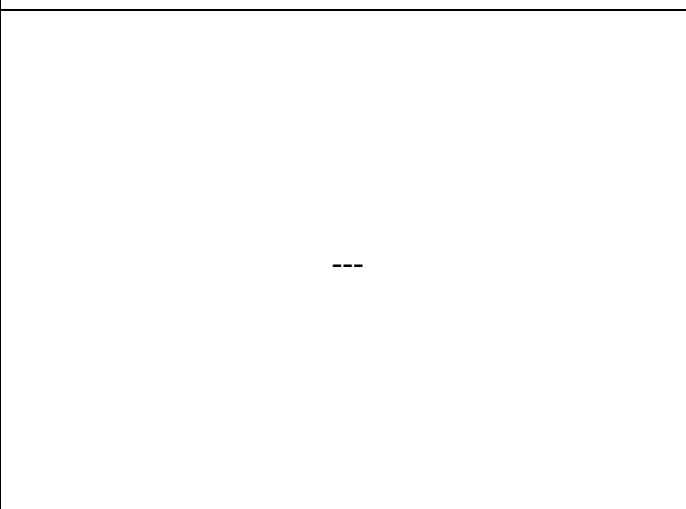
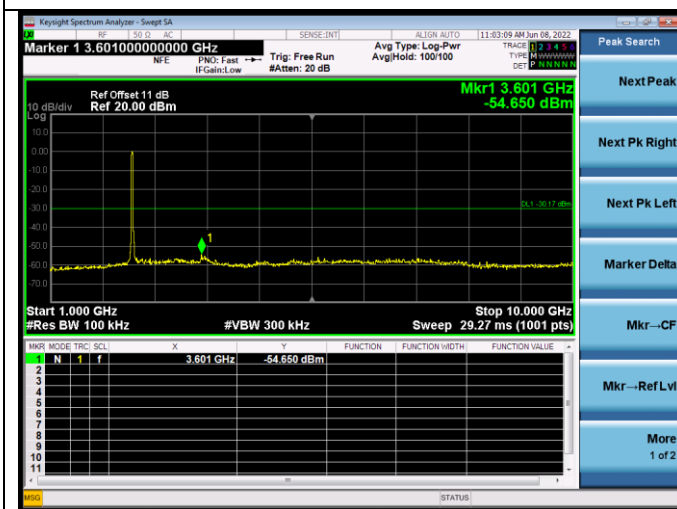
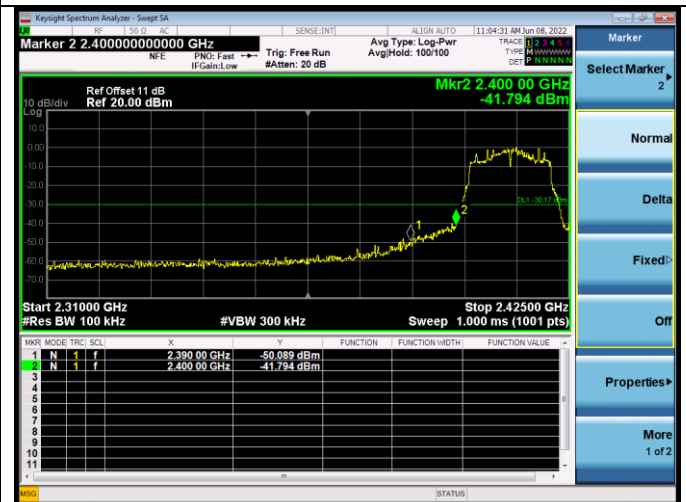
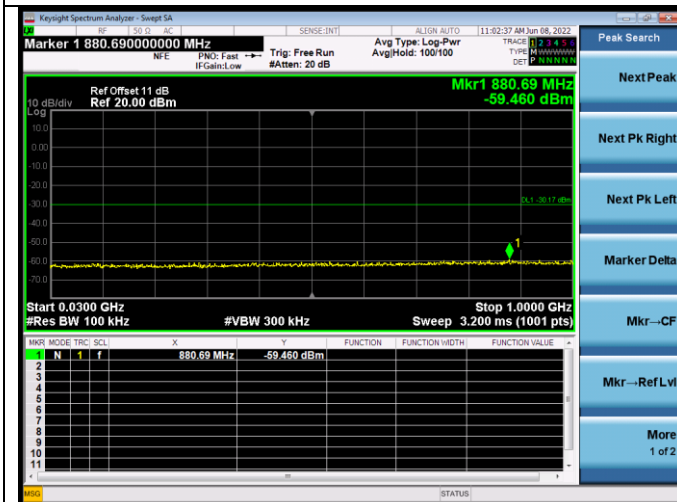
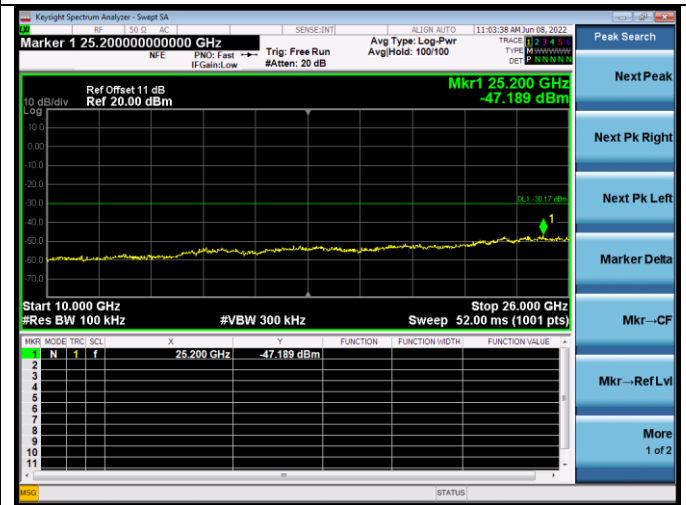
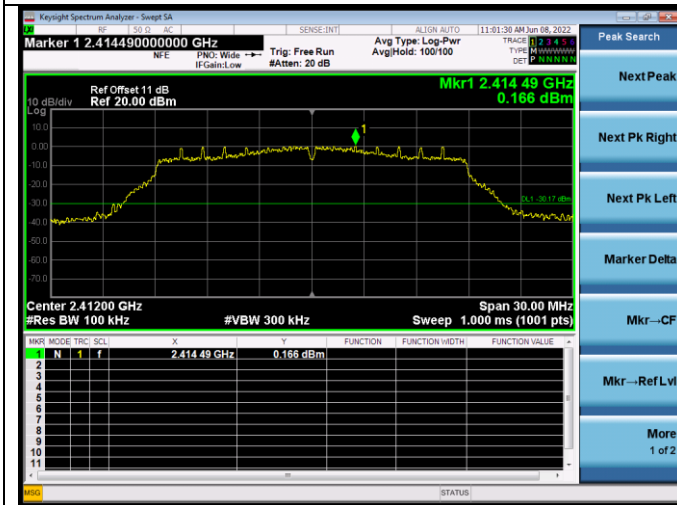
Test CH6: 2437MHz



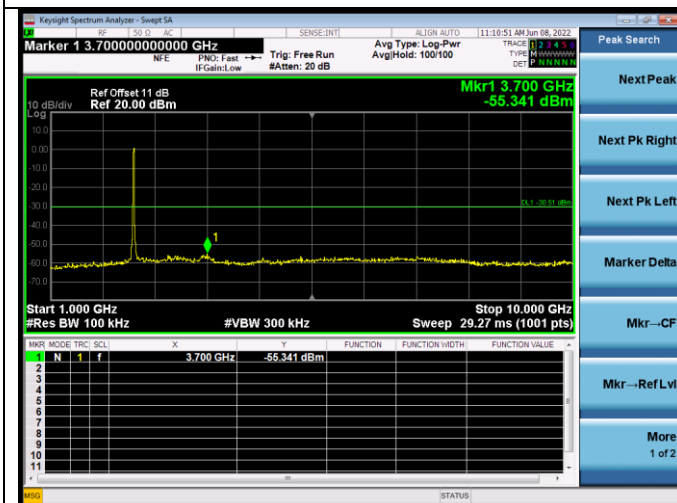
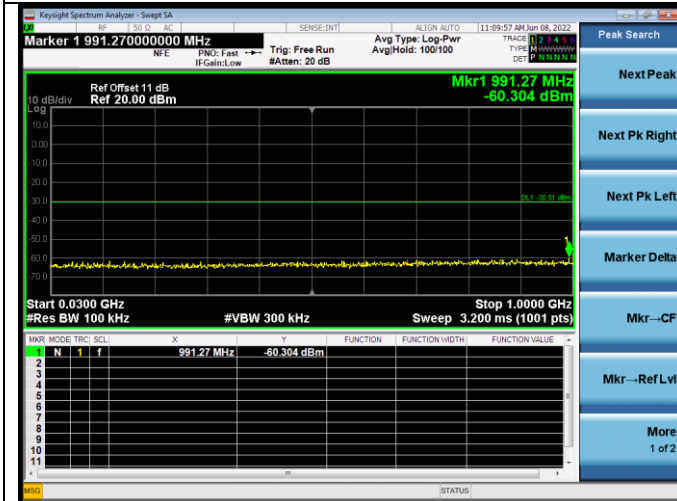
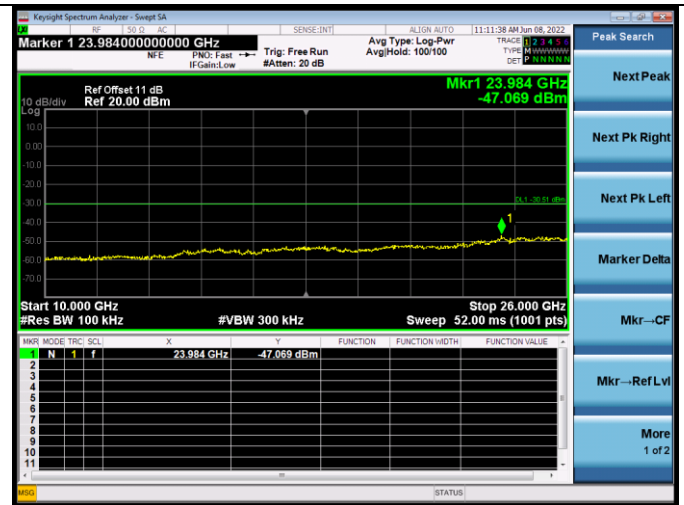
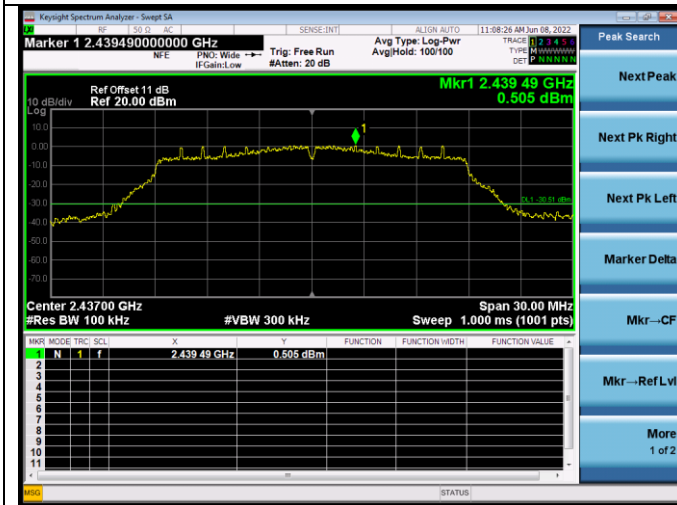
Test CH11: 2462MHz



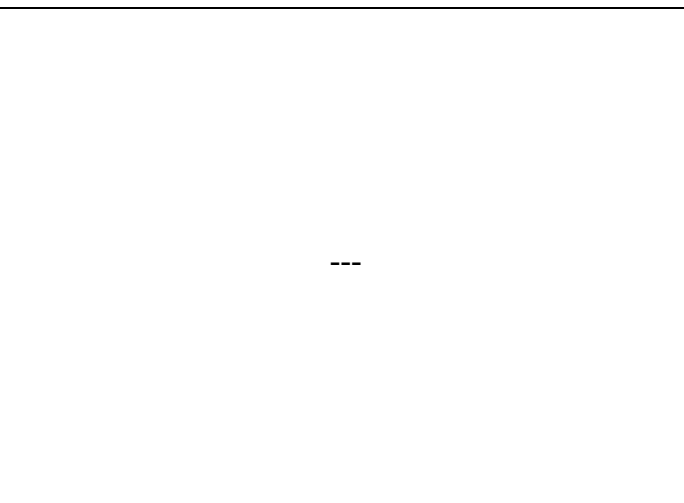
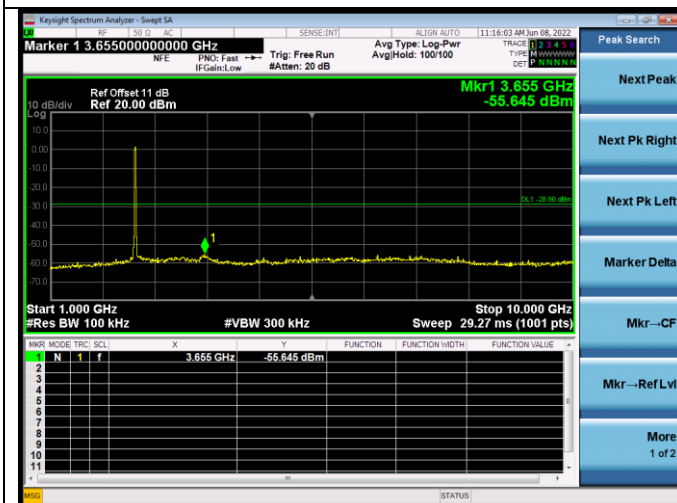
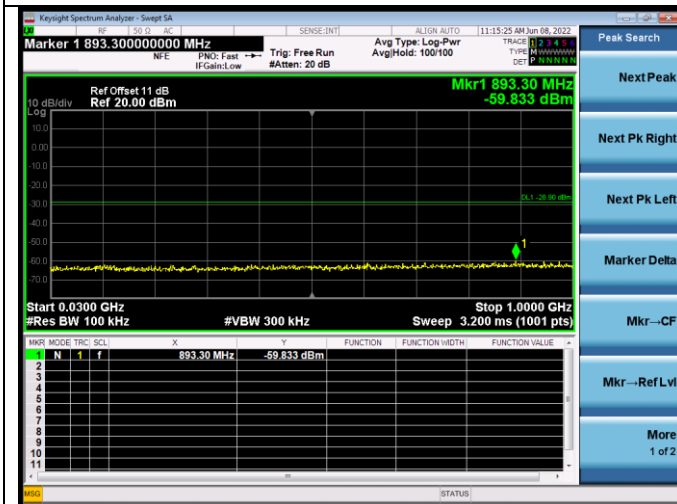
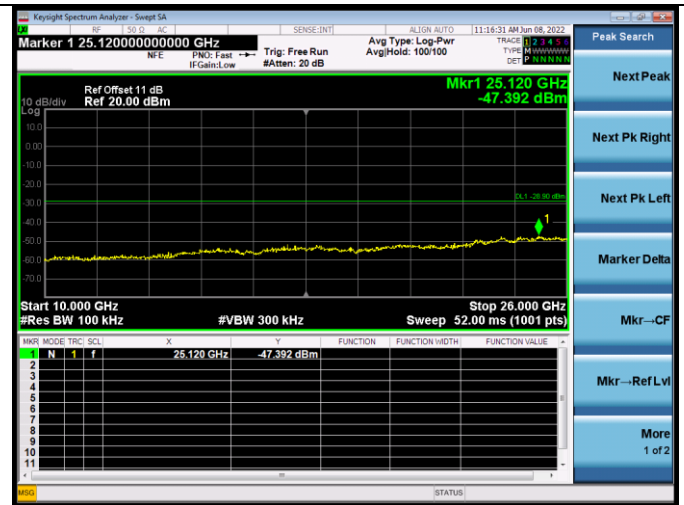
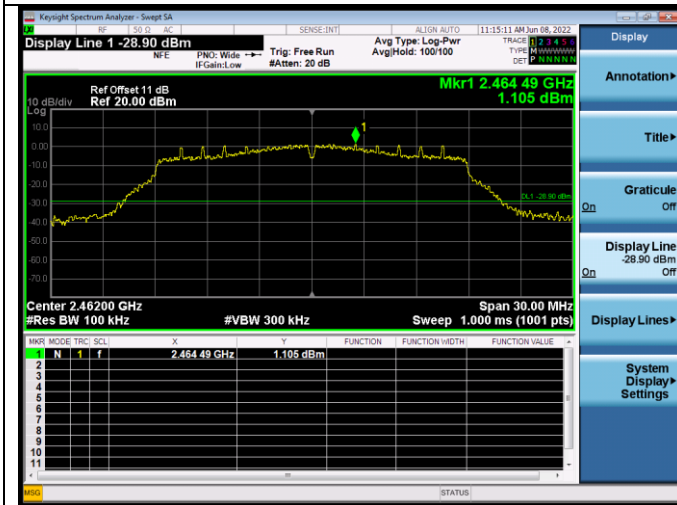
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,22	1 Year
2.	Amplifier	Agilent	8449B	3008A02495	Apr.06,22	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Jul.26,21	1 Year
4.	RF Cable	HUBER+SUHNER	SUCOFLEX-106	505238/6	Apr.06,22	1 Year

6.2. Limit

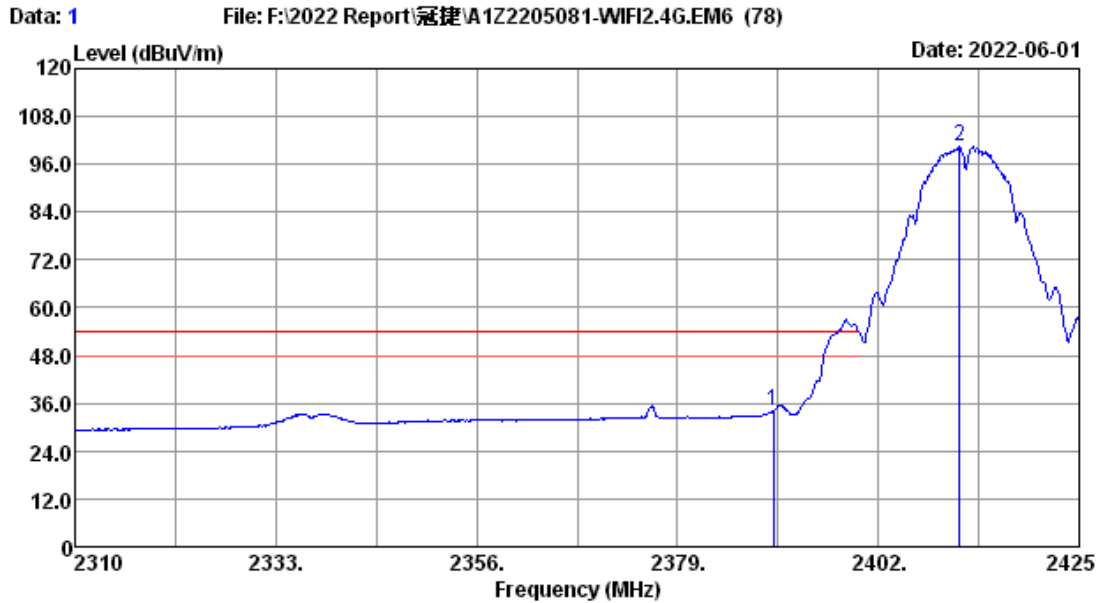
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3. Test Procedure

1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
 - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

6.4. Test Results

Pass (The testing data was attached in the next pages.)

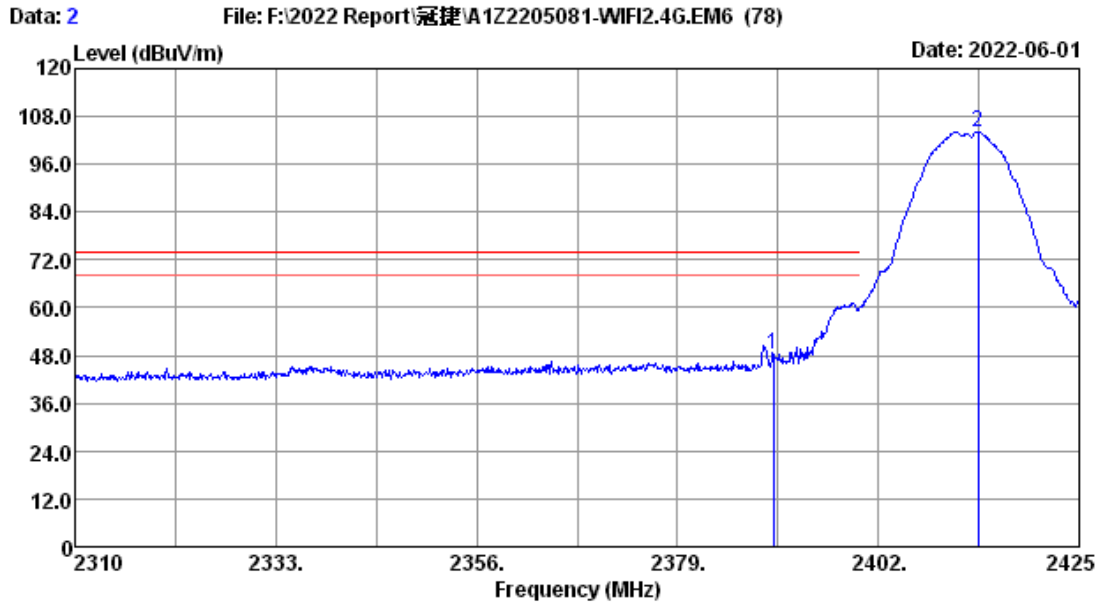


Site no.	: 3m Chamber	Data no.	: 1
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C AV		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11b 2412MHz Tx		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	37.80	35.24	34.10	54.00	19.90	Average
2	2411.32	27.93	3.66	104.27	35.24	100.62	-----	-----	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

2. The emission levels that are 20dB below the official
limit are not reported.

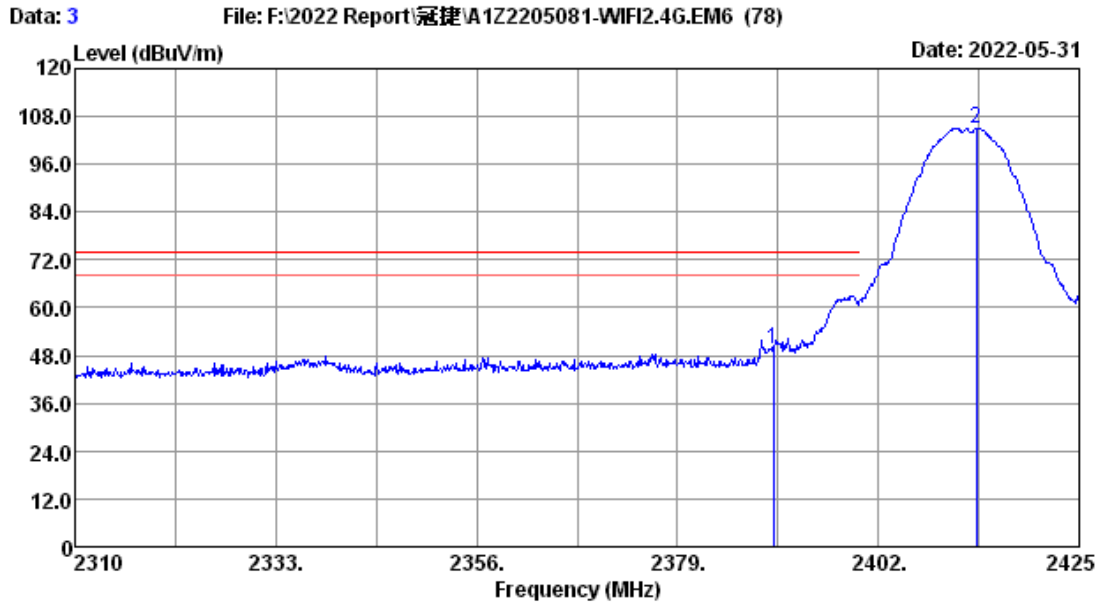


Site no.	: 3m Chamber	Data no.	: 2
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11b 2412MHz Tx		

No.	Freq. (MHz)	Ant.	Cable	Reading (dBuV)	Amp	Emission		Limits (dBuV/m)	Margin (dB)	Remark
		Factor (dB/m)	Loss (dB)		factor (dB)	Level (dBuV/m)				
1	2390.00	27.89	3.65	51.82	35.24	48.12	74.00	25.88	Peak	
2	2413.39	27.93	3.66	107.67	35.24	104.02	-----	-----	Peak	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

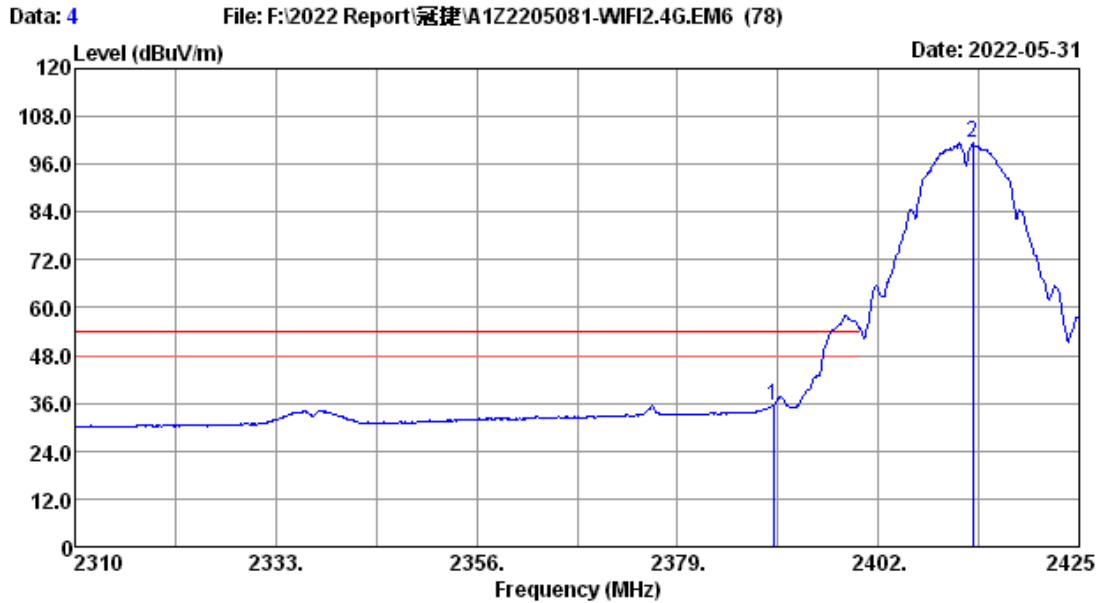
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 3
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	53.16	35.24	49.46	74.00	24.54	Peak
2	2413.27	27.93	3.66	108.66	35.24	105.01	-----	-----	Peak

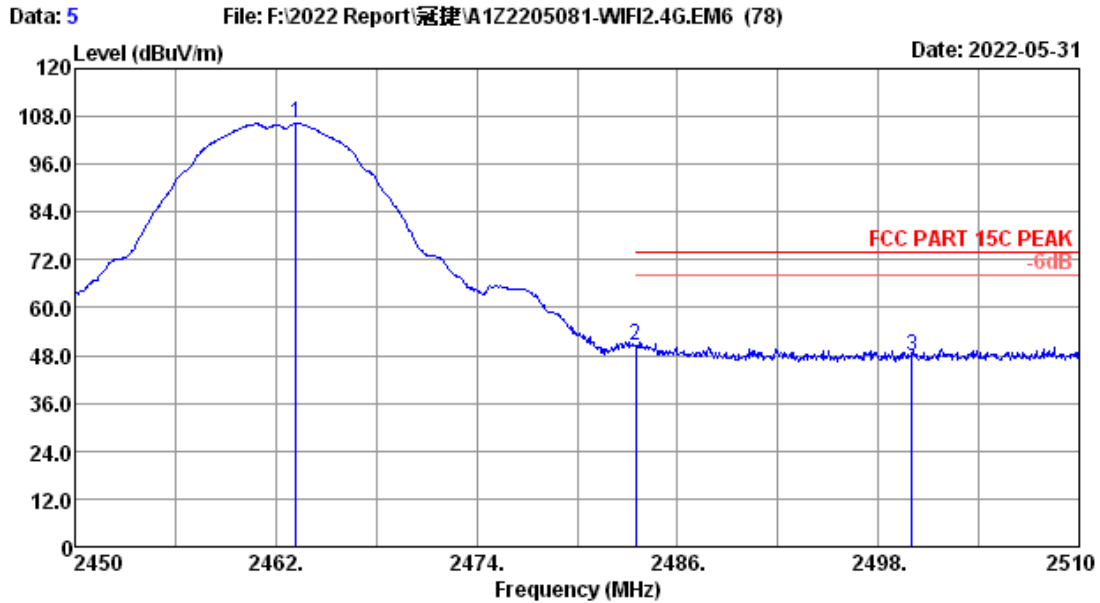
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 4
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	39.31	35.24	35.61	54.00	18.39	Average
2	2412.81	27.93	3.66	104.91	35.24	101.26	-----	-----	Average

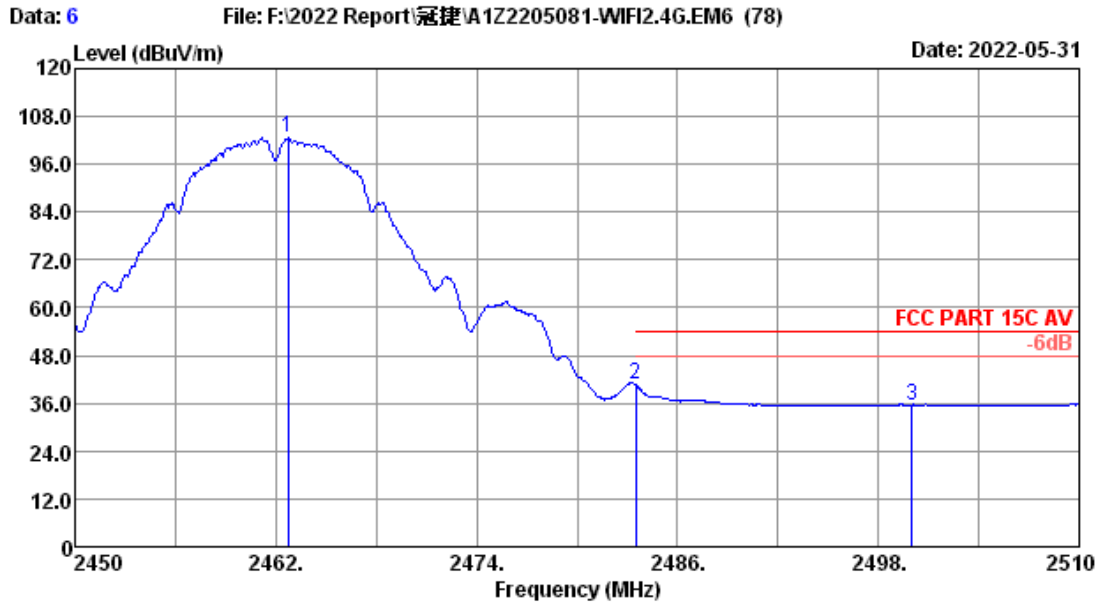
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 5
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Winter
 Test Mode : 11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.20	28.03	3.70	109.66	35.25	106.14	-----	-----	Peak
2	2483.50	28.07	3.71	54.10	35.25	50.63	74.00	23.37	Peak
3	2500.00	28.10	3.72	51.16	35.25	47.73	74.00	26.27	Peak

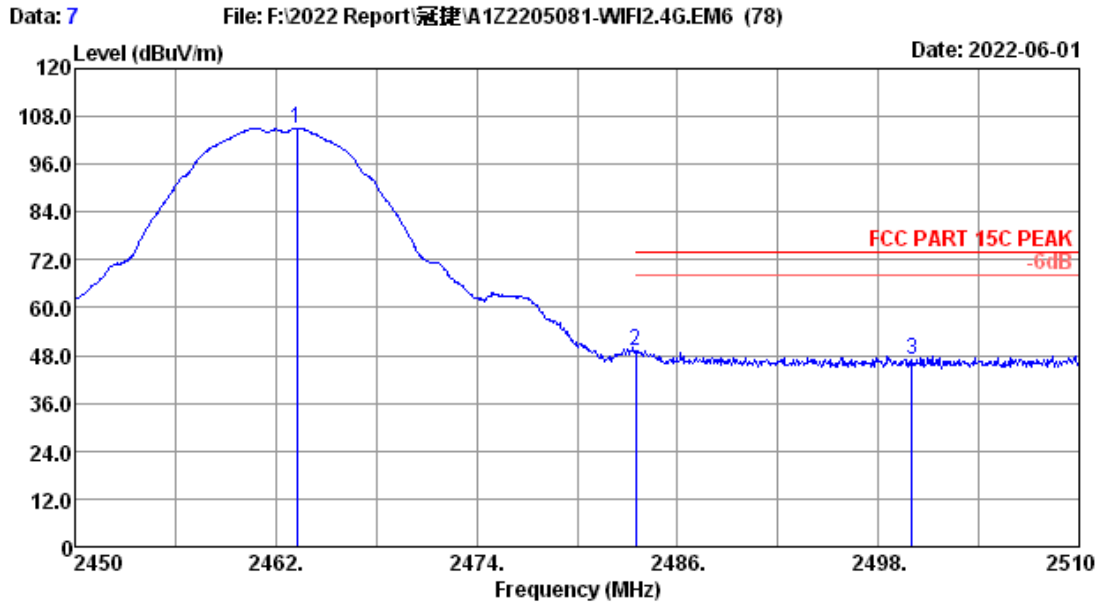
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 6
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23.8°C/53.5% Engineer : Winter
 Test Mode : 11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.72	28.03	3.70	106.10	35.25	102.58	-----	-----	Average
2	2483.50	28.07	3.71	44.13	35.25	40.66	54.00	13.34	Average
3	2500.00	28.10	3.72	39.05	35.25	35.62	54.00	18.38	Average

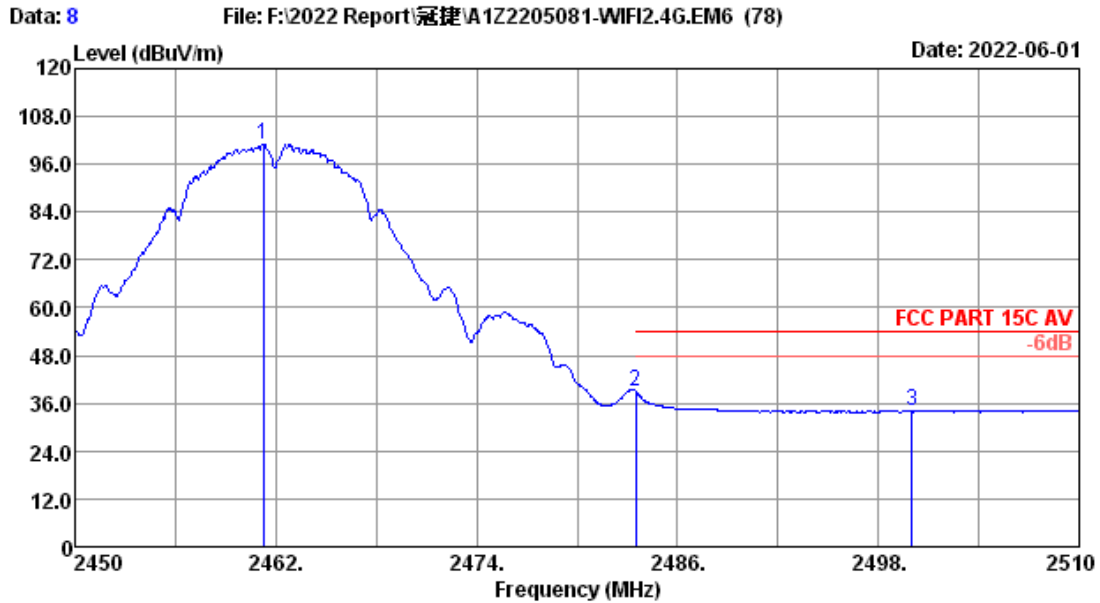
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no.	: 3m Chamber	Data no.	: 7
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11b 2462MHz Tx		

No.	Freq. (MHz)	Ant.		Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
		Factor (dB/m)					Level (dBuV/m)				
1	2463.26	28.03		3.70	108.49	35.25	104.97	-----	-----		Peak
2	2483.50	28.07		3.71	52.83	35.25	49.36	74.00	24.64		Peak
3	2500.00	28.10		3.72	50.49	35.25	47.06	74.00	26.94		Peak

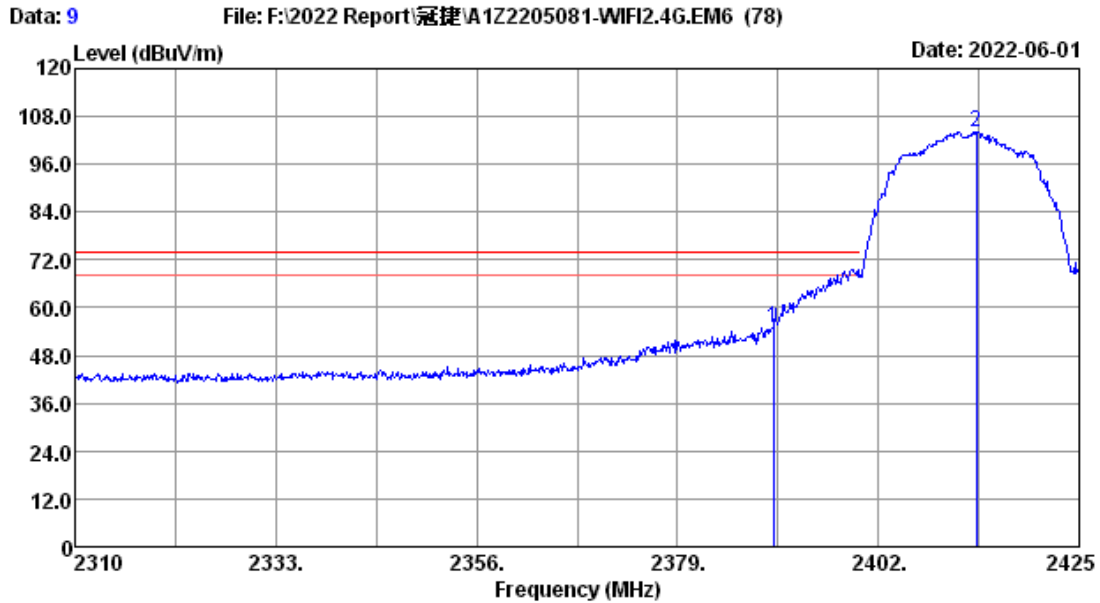
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.28	28.03	3.70	104.56	35.25	101.04	-----	-----	Average
2	2483.50	28.07	3.71	42.34	35.25	38.87	54.00	15.13	Average
3	2500.00	28.10	3.72	37.33	35.25	33.90	54.00	20.10	Average

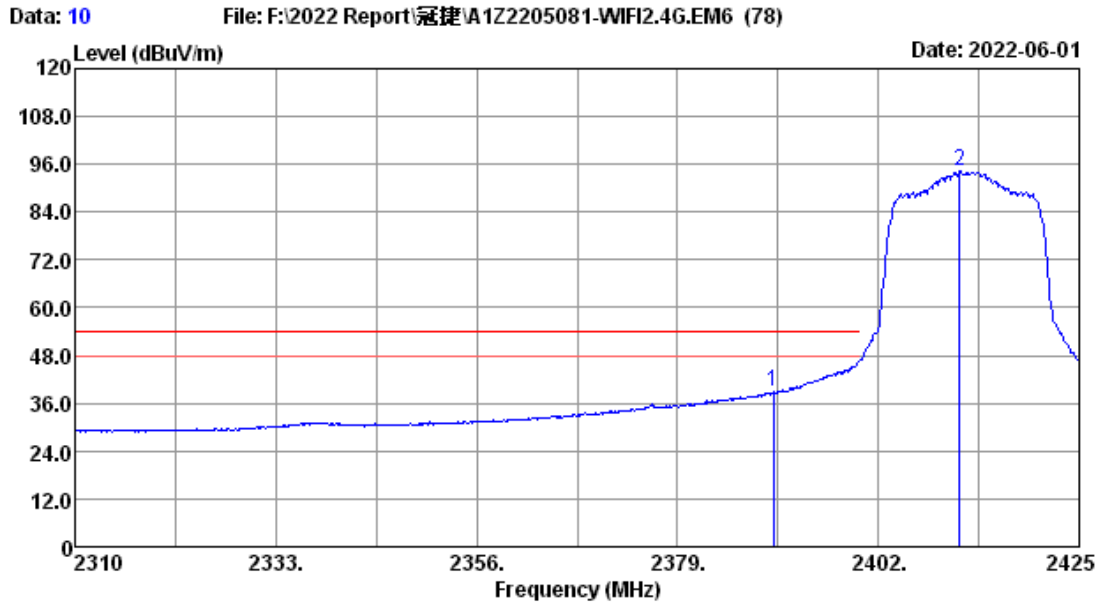
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 9
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	58.52	35.24	54.82	74.00	19.18	Peak
2	2413.27	27.93	3.66	107.88	35.24	104.23	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.

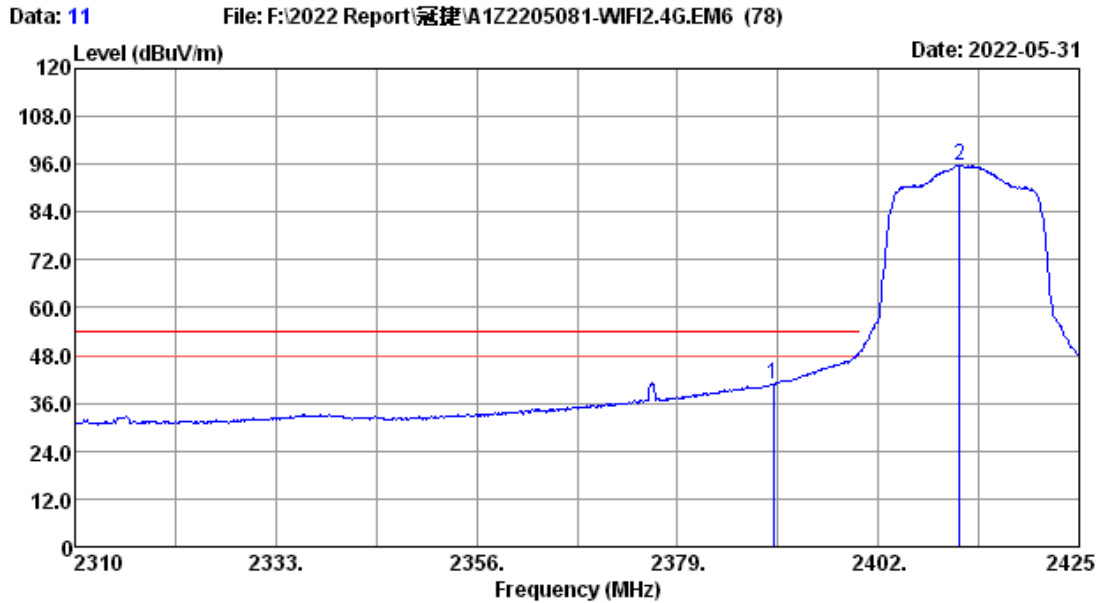


Site no.	: 3m Chamber	Data no.	: 10
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C AV		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11g 2412MHz Tx		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	42.50	35.24	38.80	54.00	15.20	Average
2	2411.32	27.93	3.66	97.90	35.24	94.25	-----	-----	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

2. The emission levels that are 20dB below the official
limit are not reported.

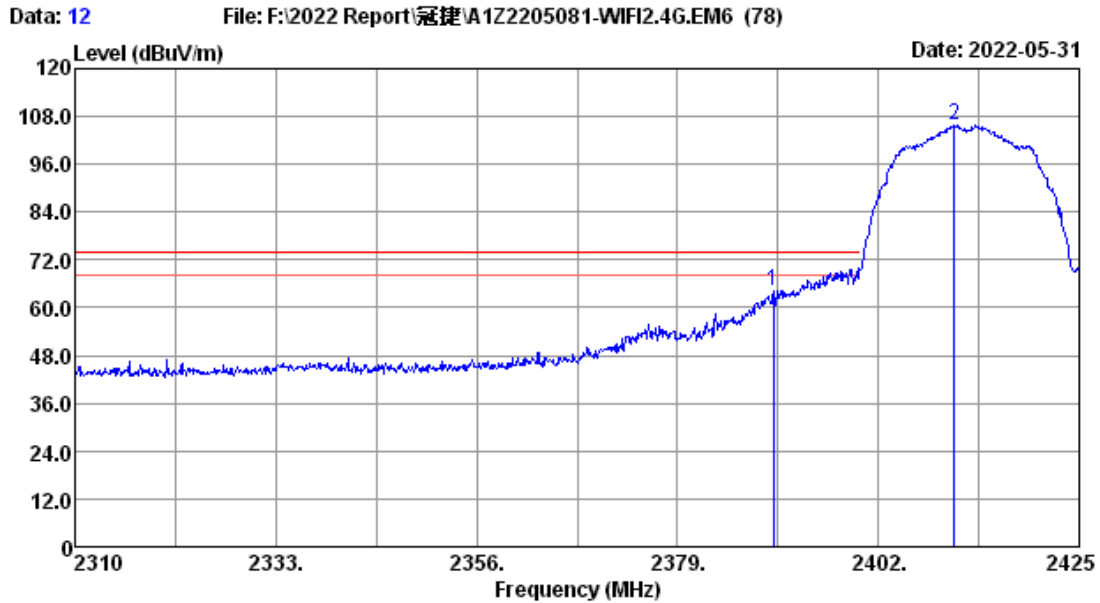


Site no.	: 3m Chamber	Data no.	: 11
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C AV		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11g 2412MHz Tx		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	44.44	35.24	40.74	54.00	13.26	Average
2	2411.32	27.93	3.66	99.49	35.24	95.84	-----	-----	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

2. The emission levels that are 20dB below the official
limit are not reported.

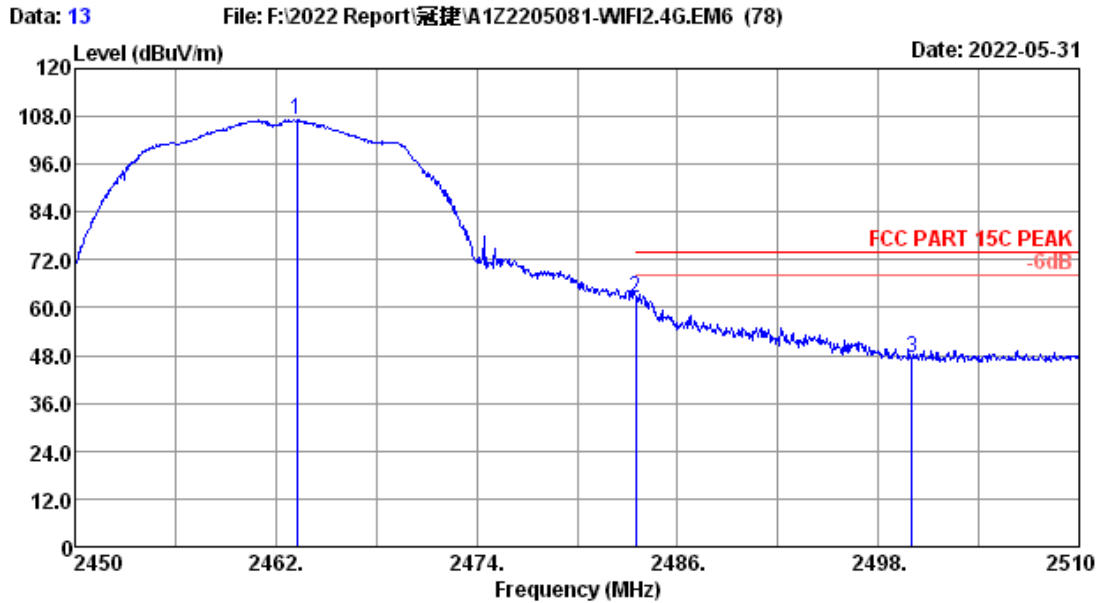


Site no.	: 3m Chamber	Data no.	: 12
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11g 2412MHz Tx		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.89	3.65	67.93	35.24	64.23	74.00	9.77	Peak
2	2410.74	27.93	3.66	109.38	35.24	105.73	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

2. The emission levels that are 20dB below the official
limit are not reported.

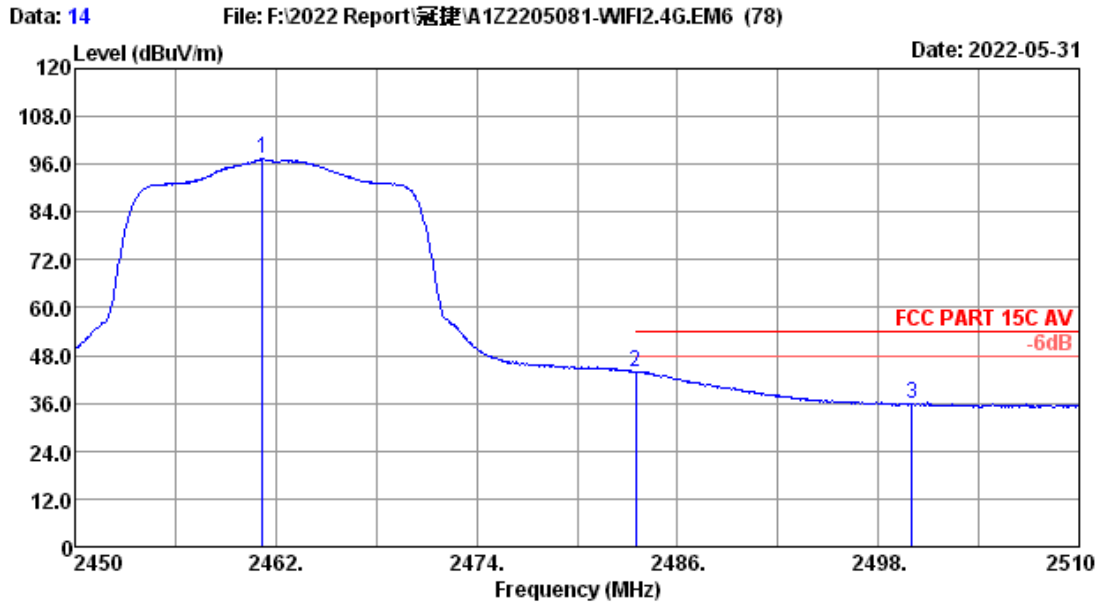


Site no.	: 3m Chamber	Data no.	: 13
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23.8°C/53.5%	Engineer	: Allen
Test Mode	: 11g 2462MHz Tx		

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.26	28.03	3.70	110.59	35.25	107.07	-----	-----	Peak
2	2483.50	28.07	3.71	66.05	35.25	62.58	74.00	11.42	Peak
3	2500.00	28.10	3.72	50.82	35.25	47.39	74.00	26.61	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp factor.

2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 14
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23.8°C/53.5% Engineer : Allen
 Test Mode : 11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.22	28.03	3.70	100.81	35.25	97.29	-----	-----	Average
2	2483.50	28.07	3.71	47.39	35.25	43.92	54.00	10.08	Average
3	2500.00	28.10	3.72	39.14	35.25	35.71	54.00	18.29	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.