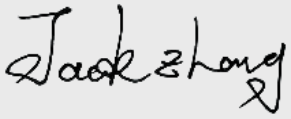
DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

Test report No:
2360694R-RF-US-P06V01

FCC & ISED TEST REPORT

Product Name	POS
Trademark	Elo
Model and /or type reference	ESY07P1
FCC ID	RBWESY07P1
IC	10757B-ESY07P1
Applicant´s name / address	Elo Touch Solutions, Inc 670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.
Test method requested, standard	47 CFR FCC Part 15 (Section 15.247) ANSI C63.10: 2013 RSS-Gen Issue 5 RSS-247 Issue 3
Verdict Summary	IN COMPLIANCE
Tested By (name / position & signature)	Jun Xu/Project Engineer 
Approved by (name / position & signature)	Jack Zhang/ Manager 
Date of issue	2023-11-15
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

INDEX

page

COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Aug. 14, 2023
Date (start test)	Aug. 19, 2023
Date (finish test)	Oct. 16, 2023

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. The 2.4G WLAN part of AirEngine6761-21T is exactly the same as AirEngine5761-11, so we only verified the power and AC Power Line Conducted Emission, and other data are quoted from AirEngine5761-11.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
U_N	:	Nominal voltage
*T*x	:	Transmitter
*R*x	:	Receiver
N/A	:	Not Applicable
N/M	:	Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2360694R-RF-US-P06V01	V1.0	Initial issue of report.	2023-11-15

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).

2. These test results on a sample of the device are for the purpose of demonstrating Compliance with 47 CFR FCC Part 15 (Section 15.247),RSS-247 Issue 3. RSS-Gen Issue 5.

3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.

4. The test results presented in this report relate only to the object tested.

5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.

6. This report will not be used for social proof function in China market.

7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:

- Chapter 1.1 General Description of the Item(s);
- Chapter 1.2 Antenna Informaion;
- Chapter 1.3 Data Rate;
- Chapter 1.4 Channel List;

USED EQUIPMENT

Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
Wireless Connectivity Tester	R&S	CMW 270	102593	2023.05.20	2024.05.19	V 4.0.60	N/A
Coaxial Cable	N/A	N/A	2477	2023.06.08	2024.06.07	N/A	N/A
Coaxial Cable	N/A	N/A	2478	2023.06.08	2024.06.07	N/A	N/A
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2023.05.20	2024.05.19	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2023.08.25	2024.08.24	N/A	N/A
Test system							
Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
MAX Signal Analyzer	Keysight	N9010A	MY48030494	2022.12.08	2023.12.07	A.14.03	N/A
RF Control Unit	Tonscend	JS0806-2	22G8060594	2023.02.04	2024.02.03	N/A	N/A
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY61252529	2023.05.20	2024.05.19	B.01.96	N/A
Frequency extender for EXG or MXG	Keysight	N5182BX07	MY59362500	2023.05.20	2024.05.19	N/A	N/A
EXG-B MW Analog Signal Generator	Keysight	N5173B	MY61252566	2023.08.26	2024.08.25	B.01.95	N/A
Test Software	Tonscend	TS1120	JS1120-3	N/A	N/A	N/A	V3.0.22

AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
EMI Test Receiver	R&S	ESCI	100726	2023.08.26	2024.08.25	4.42 SP1	N/A
Two-Line V-Network	R&S	ENV 216	101044	2023.01.07	2024.01.06	N/A	N/A
Two-Line V-Network	R&S	ENV 216	101189	2023.05.14	2024.05.13	N/A	N/A
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2023.05.14	2024.05.13	N/A	N/A
Coaxial Cable	Huber+Suhner	RG 223	TR1-C1	2023.05.14	2024.05.13	N/A	N/A
Impedance Stabilization Network	Teseq GmbH	ISN T800	57318	2023.03.07	2024.03.06	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	EMC01	2023.05.19	2024.05.18	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	N/A

Radiated Emission(9KHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
EMI Test Receiver	R&S	ESCI	100176	2023.05.20	2024.05.19	4.42 SP3	N/A
Loop Antenna	R&S	HFH2-Z2E	101149	2023.04.25	2024.04.24	N/A	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2023.02.20	2024.02.19	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	AC2-TH	2023.05.19	2024.05.18	N/A	N/A
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2023.05.21	2024.05.20	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

Radiated Emission (1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Versiom	Software version
EXA Spectrum Analyzer	Keysight	N9020B	MY60112218	2022.12.08	2023.12.07	A.31.05	N/A
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2023.05.14	2024.05.13	N/A	N/A
Preamplifier	CHENGYI	EMC184045SE	980263	2023.07.09	2024.07.08	N/A	N/A
DRG Horn	ETS-Lindgren	3117	00123988	2022.11.01	2023.10.31	N/A	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2023.05.31	2024.05.30	N/A	N/A
Filter Switch Box	MVE	MSW-F196	C070001S	2023.05.21	2024.05.20	N/A	N/A
Temperature / Humidity Meter	RTS	RTS-8S	AC5-TH	2023.05.19	2024.05.18	N/A	N/A
Coaxial Cable	TIMES	HF290A-NMNM-5.00M	651945-0001	2022.11.19	2023.11.18	N/A	N/A
Coaxial Cable	TIMES	HF290A-NMNM-6.00M	651946-0001	2022.11.19	2023.11.18	N/A	N/A
Coaxial Cable	TIMES	HF290A-NMNM-0.50M	651944-0001	2022.11.19	2023.11.18	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Test item	Uncertainty
AC Power Line Conducted Emission	± 2.92 dB
Peak Power Output	± 1.13 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 4.60 dB 200MHz~1GHz: 4.10 dB Vertical: 30MHz~200MHz: 4.80 dB 200MHz~1GHz: 4.10 dB
Radiated Emission(1GHz~40GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB Horizontal: 18GHz~40GHz: 4.70 dB Vertical: 18GHz~40GHz: 4.60 dB
RF antenna conducted test	± 1.13 dB
Radiated Emission Band Edge	± 5.00 dB
DTS Bandwidth	± 279 Hz
Occupied Bandwidth	± 279 Hz
Power Density	± 1.13 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name ..... :	POS
Model No. ..... :	ESY07P1
Trademark. ..... :	Elo
FCC ID ..... :	RBWESY07P1
IC ..... :	10757B-ESY07P1
Hardware Version ..... :	V1.05
Software Version ..... :	T14
Manufacturer ..... :	Elo Touch Solutions, Inc
Manufacturer Address ..... :	670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.
Factory ..... :	ShuoGe Intelligent Technology Co.,Ltd.
Factory address ..... :	Room 308-310, Building 1, No.2 8th Road, Baiyang Street, Qiantang New Area,Hangzhou City, Zhejiang Province, P.R. China(310018)

Wireless specifiction ..... :	WIFI	
Operating frequency range(s) ..... :	2412~2462MHz	
Number of channel ..... :	802.11b/g/n(20MHz) : 11 802.11n(40MHz) : 07	
Type of Modulation & Data Rate .... :	Refer to Clause 1.3	
Device category ..... :	☐	Fixed point-to-point
	☐	Emit multiple directional beams, simultaneously or sequentially
	☒	Other cases

Rated power supply .....:	Voltage and Frequency	
	☐	AC: 220 - 240 V, 50/60 Hz
	☐	AC: 100 - 240 V, 50/60 Hz
	☐	DC: 24 Vdc
	☐	Poe:
	☒	Adapter:
Brand of adapter .....:	BJD	
Adapter model.....:	AT-803A-090200A	
	Input: 100-240V ~0.5A, 50/60Hz Output: 5V/3.0A, 9V/2.0A PPS: 3.3-5.9V/3A, 3.3V-11V/1.65A Max WATT: 18W Max	
Brand of adapter .....:	BILLION	
Adapter model.....:	BQ018-090200CXX	

	Input: 100-240V ~0.5A, 50/60Hz Output: 5V/3.0A, 9V/2.0A PPS: 3.3-5.9V/3A, 3.3V-11V/2.0A Max WATT: 18W Max	
Mounting position.....:	☒	Tabletop equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held/Portable equipment
	☐	Other:
Note: The customer used two adapter models, AT-803A-090200A and BQ018-090200CXX. We verified the two adapters and there was no difference in the test results. Finally, we used the AT-803A-090200A adapter for all tests.		

1.2 Antenna Information

Antenna model / type number..... :	N/A			
Antenna serial number..... :	N/A			
Antenna Delivery ..... :	☒	1TX + 1RX		
	☒	2TX + 2RX		
	☐	Others:……		
Antenna technology ..... :	☒	SISO		
	☒	MIMO	☒	CDD
			☐	Beam-forming
Antenna Type..... :	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☒	FPC
			☐	PCB
			☐	Metal Monopole Antenna
			☐	Ceramic chip
			☐	Others……..

Antenna Gain ..... :	SISO:	Antenna1	1.4dBi
		Antenna2	2.0dBi
	CDD:	2.0dBi for Power; 5.01dBi for PSD	

1.3 Data Rate

IEEE 802.11b

Modulation	Data Rate(Mb/s)
DSSS	1
DSSS	2
CCK	5.5
CCK	11

IEEE 802.11g

Modulation	R	Data Rate(Mb/s)
BPSK	1/2	6
BPSK	3/4	9
QPSK	1/2	12
QPSK	3/4	18
16-QAM	1/2	24
16-QAM	3/4	36
64-QAM	2/3	48
64-QAM	3/4	54

IEEE 802.11n

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)			
				800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz
1	0	BPSK	1/2	6.5	13.5	7.2	15.0
1	1	QPSK	1/2	13.0	27.0	14.4	30.0
1	2	QPSK	3/4	19.5	40.5	21.7	45.0
1	3	16-QAM	1/2	26.0	54.0	28.9	60.0
1	4	16-QAM	3/4	39.0	81.0	43.3	90.0
1	5	64-QAM	2/3	52.0	108.0	57.8	120.0
1	6	64-QAM	3/4	58.5	121.5	65.0	135.0
1	7	64-QAM	5/6	65.0	135.0	72.2	150.0
2	8	BPSK	1/2	13	27	14.4	30
2	9	QPSK	1/2	26	54	28.8	60
2	10	QPSK	3/4	39	81	43.4	90
2	11	16-QAM	1/2	52	108	57.8	120
2	12	16-QAM	3/4	78	162	86.6	180
2	13	64-QAM	2/3	104	216	115.6	240
2	14	64-QAM	3/4	117	243	130	270
2	15	64-QAM	5/6	130	270	144.4	300

Symbol	Explanation	Symbol	Explanation
R	Code rate	GI	guard interval

Note: We have evaluated low/mid/high data rate, the blue font is the highest power data rate.

1.4 Channel List

IEEE 802.11b/g & IEEE 802.11n (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412 MHz	2	2417 MHz	3	2422 MHz	4	2427 MHz
5	2432 MHz	6	2437 MHz	7	2442 MHz	8	2447 MHz
9	2452 MHz	10	2457 MHz	11	2462 MHz	-	-

IEEE 802.11n(40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	2422 MHz	4	2427 MHz	5	2432 MHz	6	2437 MHz
7	2442 MHz	8	2447 MHz	9	2452 MHz	-	-

Note: The General Description of the Item, antenna information,Test Data Rate and Channel List in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Test Mode	Mode 1: Transmit by 802.11b
	Mode 2: Transmit by 802.11g
	Mode 3: Transmit by 802.11n(20MHz)
	Mode 4: Transmit by 802.11n(40MHz)

Note 1: Regards to the frequency band operation: the lowest, middle and highest frequency channel were selected to perform the test, then shown on this report.

Note 2: For portable device, radiated tests was verified over X, Y, Z axis, and shown the worst case on this report.

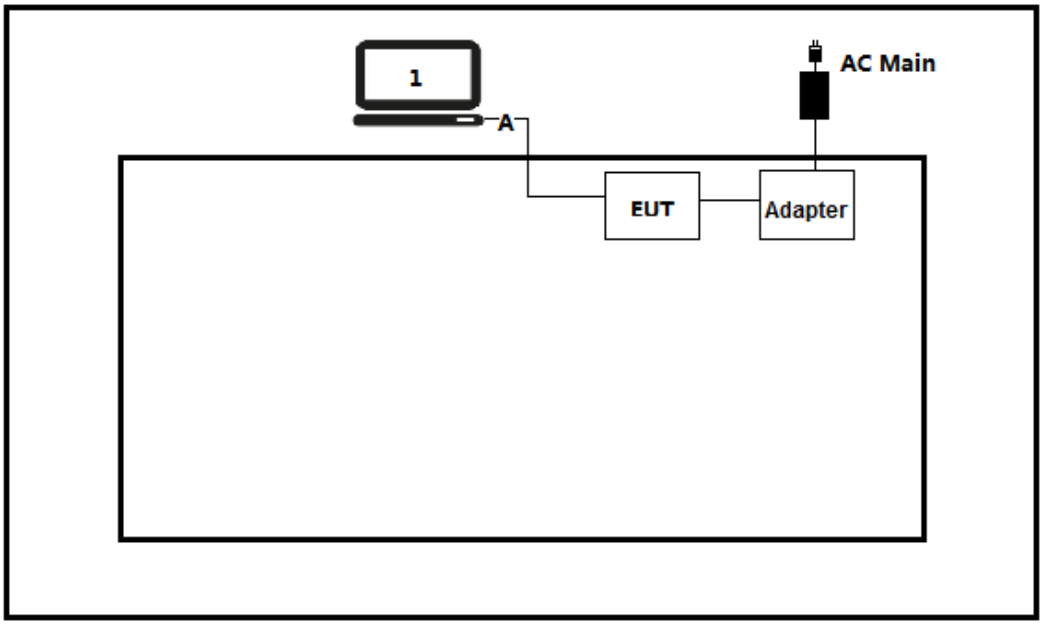
2.2 Auxiliary equipment / Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	Think pad x220	Lenovo	Adapter
(2) USB Control Cable	N/A	N/A	N/A
(3) USB Control Cable	N/A	N/A	N/
software	Type / Version	Manufacturer	Supplied by
QRCT	V4.0	N/A	N/A

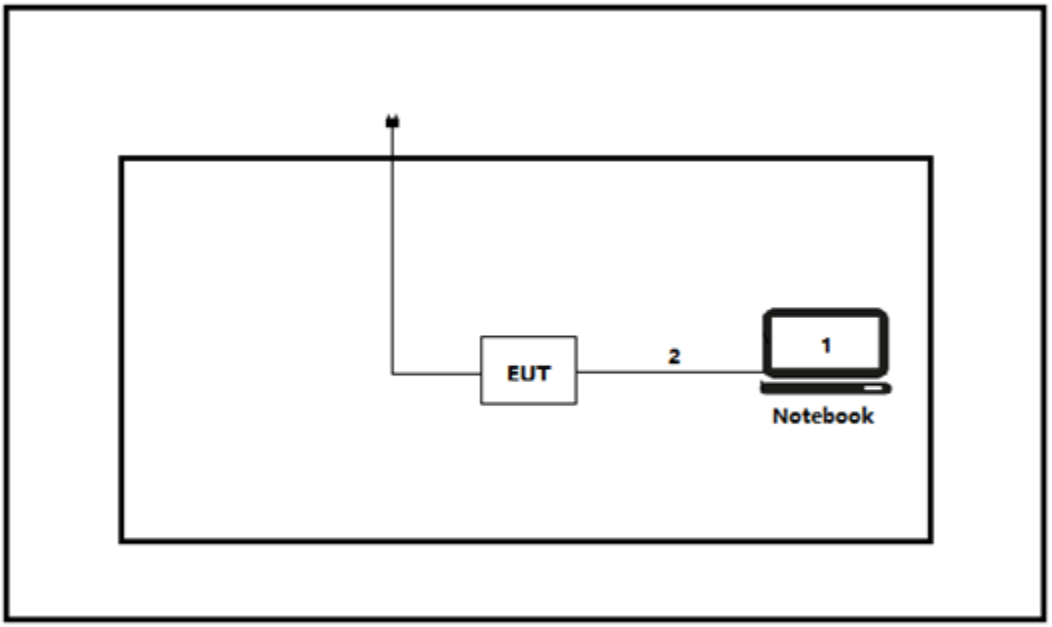
Accessories Information	Cable		
	Length used during test [m]	Attached during test	Shielded
(2)USB Control Cable	1	☒	☒
(3)USB Control Cable	8	☒	☒

2.3 Test Configuration / Block diagram used for tests

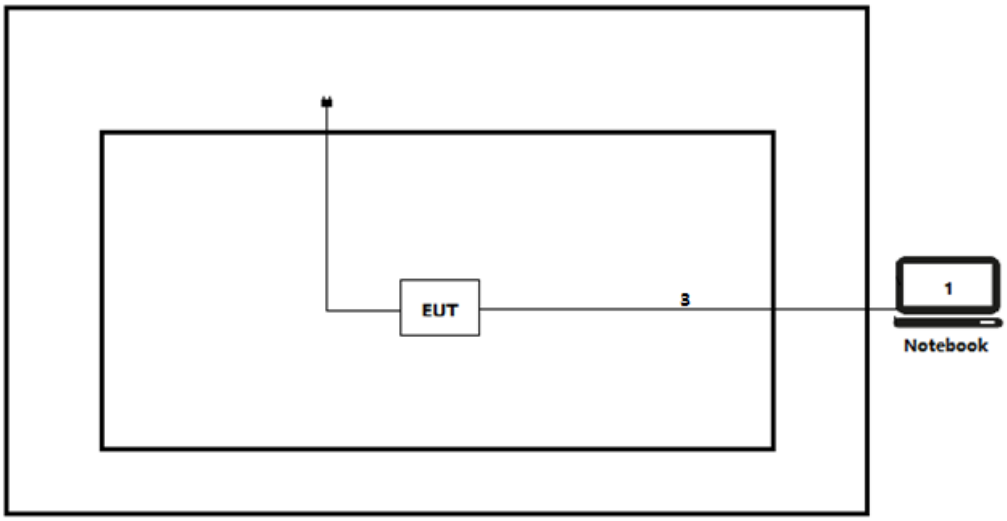
Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Conducted test



Test setup Diagram- Radiated Emission



2.4 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Run the software “QRCT” on the notebook computer.
3	Open the serial port and enter the corresponding commands to configure the test mode, test channel, test power and data rate.
4	Verify that the EUT works properly.

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2023	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 2	2021	General Requirements forCompliance of Radio Apparatus
KDB 662911	2020	Provision to Allow Measurement of Directional Gain of Multi-Antenna Systems for Compliance Verification
RSS-247 Issue 3	2023	Digital Transmission Systems (DTSs),Frequency Hopping Systems (FHSs)and Licence-Exempt Local Area Network(LE-LAN) Devices

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Requirement – Test Item of FCC	Standard(s)	Verdict	Remark
20dB Emission Bandwidth	FCC 15.247(a)(2)	PASS	Test data please refer to **Appendix A**
Maximum conducted output power	15.247 (b)(3)	PASS	Test data please refer to **Appendix C**
Maximum power spectral density	FCC 15.247(e)	PASS	Test data please refer to **Appendix D**
Band edge measurements	FCC 15.247(d) FCC 15.205 FCC 15.209	PASS	Test data please refer to **Appendix E**
Conducted Spurious Emission	FCC 15.247(d), FCC 15.209	PASS	Test data please refer to **Appendix F**
Duty cycle	ANSI C63.10:2013	PASS	Test data please refer to **Appendix G**
Emissions in Restricted Bands	FCC 15.205 FCC 15.209	PASS	Test data please refer to **Appendix H**
AC Power Line Conducted Emission	FCC 15.207	PASS	Test data please refer to **Appendix I**
Antenna Requirement	FCC 15.203	PASS	---

Requirement – Test case of ISED	Standard(s)	Verdict	Remark
DTS Bandwidth	RSS-Gen Issue 5 Paragraph 6.7 RSS-247 Issue 3 Paragraph 5.2	PASS	Test data please refer to **Appendix A**
Occupied Channel Bandwidth	RSS-Gen Issue 5 Paragraph 6.7 RSS-247 Issue 3 Paragraph 5.2	PASS	Test data please refer to **Appendix B**
Maximum conducted output power	RSS-247 Issue 3 Paragraph 5.4(d)	PASS	Test data please refer to **Appendix C**
Maximum power spectral density	RSS-247 Issue 3 Paragraph 5.2(b)	PASS	Test data please refer to **Appendix D**
Band edge measurements	RSS-Gen Issue 5 Paragraph 8.10	PASS	Test data please refer to **Appendix E**
Conducted Spurious Emission	RSS-247 Issue 3 Paragraph 5.5	PASS	Test data please refer to **Appendix F**
Duty cycle	ANSI C63.10:2013	PASS	Test data please refer to **Appendix G**
Emissions in Restricted Bands	RSS-Gen Issue 5 Paragraph 8.9	PASS	Test data please refer to **Appendix H**
AC Power Line Conducted Emission	RSS-Gen Issue 5 Paragraph 8.8	PASS	Test data please refer to **Appendix I**
Antenna Requirement	RSS-Gen Issue 5 Paragraph 6.8	PASS	---

3.4 Power setting in test

Mode	Channel	Frequency (MHz)	Power setting		
			SISO:ANT1	SISO:ANT2	CDD:ANT1+2
Mode1	01	2412	18.5	18.0	N/A
	06	2437	18.5	18.0	N/A
	11	2462	18.5	18.0	N/A
Mode2	01	2412	17.5	17.0	N/A
	06	2437	17.5	17.0	N/A
	11	2462	17.5	17.0	N/A
Mode3	01	2412	15.5	15.0	15.0
	06	2437	15.5	15.0	15.0
	11	2462	15.5	15.0	15.0
Mode4	03	2422	15.0	14.5	14.5
	06	2437	15.0	14.5	14.5
	09	2452	15.0	14.5	14.5

3.5 Test Matrix

Test item	Model: ESY07P1	
	1(#1)	2(#2)
DTS Bandwidth	☒	☐
Occupied Channel Bandwidth	☒	☐
Maximum conducted output power	☒	☐
Maximum power spectral density	☒	☐
Band edge measurements	☐	☒
Conducted Spurious Emission	☒	☐
Duty cycle	☒	☐
Emissions in Restricted Bands	☐	☒
AC Power Line Conducted Emission	☐	☒
Note1: The only difference between sample #1 and sample #2 is whether to keep the original antenna, sample #1 is a conduction test product that removes the original antenna and is equipped with SMA wires, and sample #2 is a complete product that retains the original antenna.		

3.6 Test Facility

USA	**:**	**FCC Designation Number: CN1199**
CA	**:**	**ISED CAB identifier: CN0040**

4 TEST RESULTS

4.1 Emissions in restricted frequency bands	VERDICT: PASS

4.1.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.205; 15.209

Restricted Bands of operation for FCC

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
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
8.81425 – 8.81475	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	Above 38.6
13.36 – 13.41	--	--	--

Restricted Band Emissions Limit

Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30(Note 1)
1.705 - 30	30	29.5	30(Note 1)
30 - 88	100	40	3(Note 2)
88 - 216	150	43.5	3(Note 2)
216 - 960	200	46	3(Note 2)
Above 960	500	54	3(Note 2)

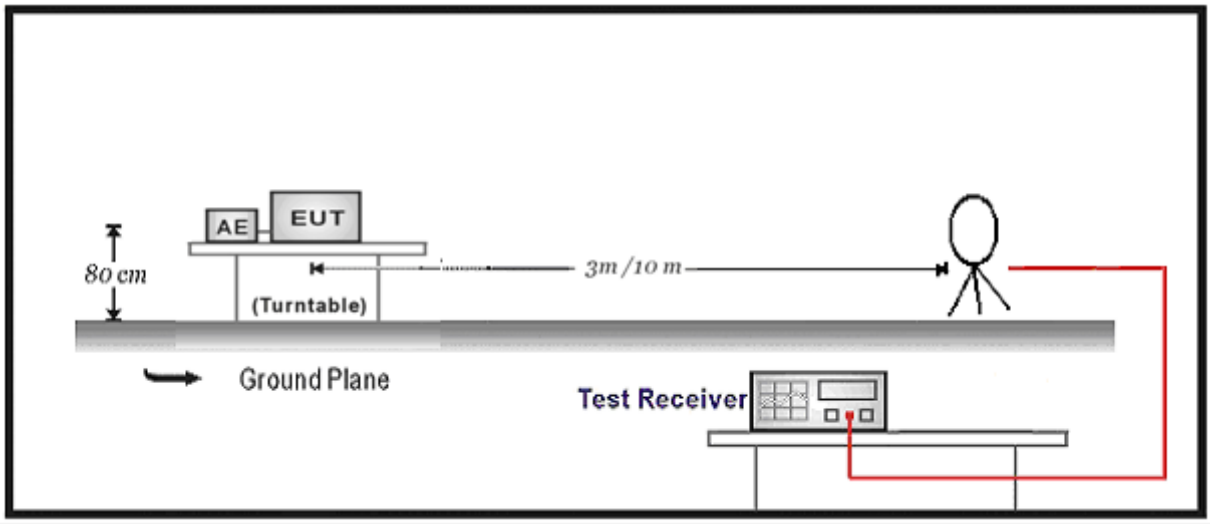
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field

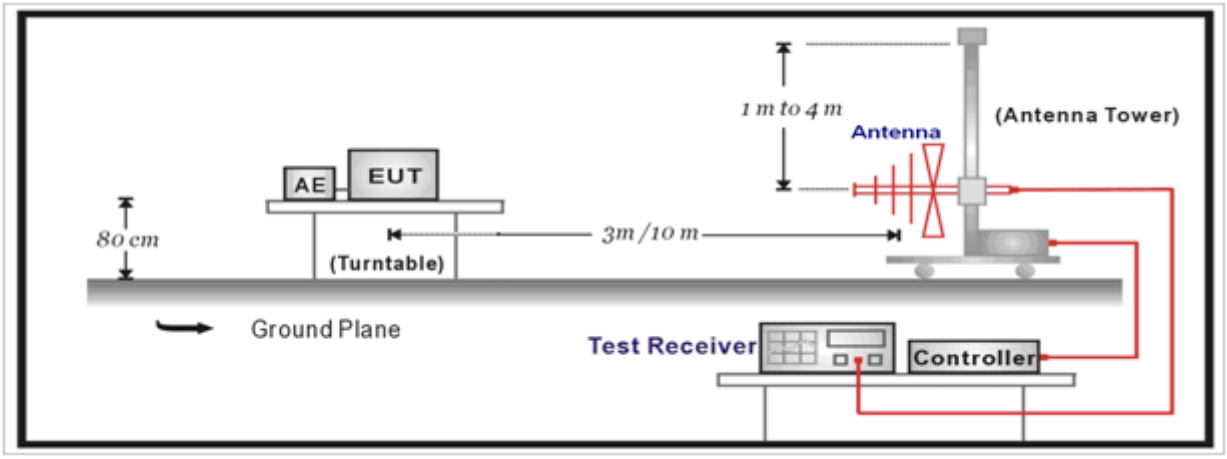
measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.1.2 Test Setup

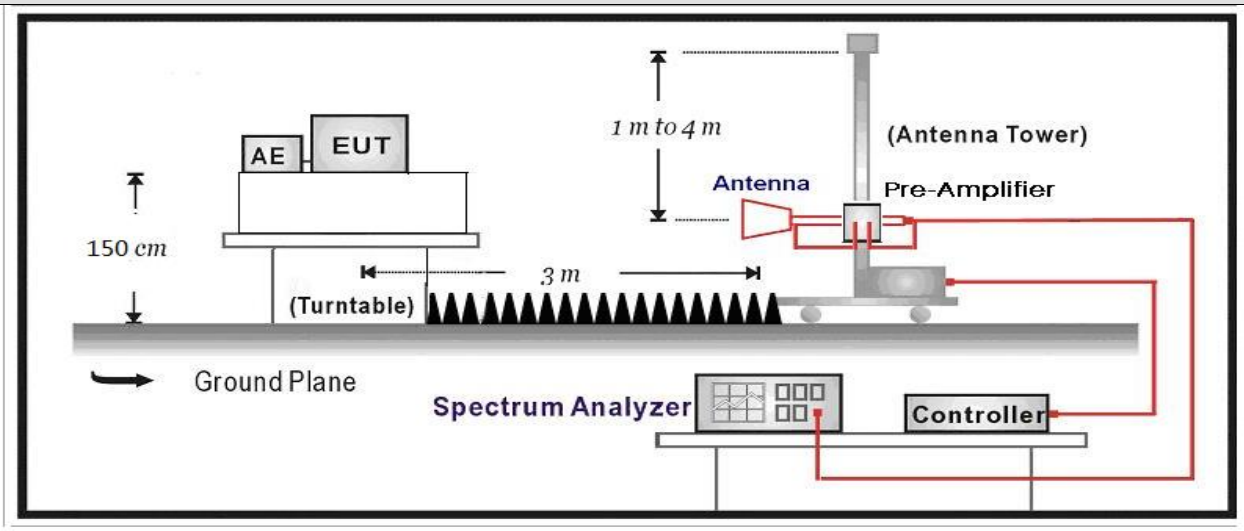
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:



4.1.3 Test Procedure

	References Rule	Chapter	Description
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	6.3	Radiated spurious emission test
	☒ ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
	☒ ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
	☒ ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	☐ ANSI C63.10	11.12.2	Antenna-port conducted measurements
	☐ ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	☐ ANSI C63.10	11.12.2.4	Peak power measurement procedure
	☐ ANSI C63.10	11.12.2.5	Average power measurement procedures
	☐ ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	☐ ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	☐ ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

4.2 Emissions in non-restricted frequency band	VERDICT: PASS

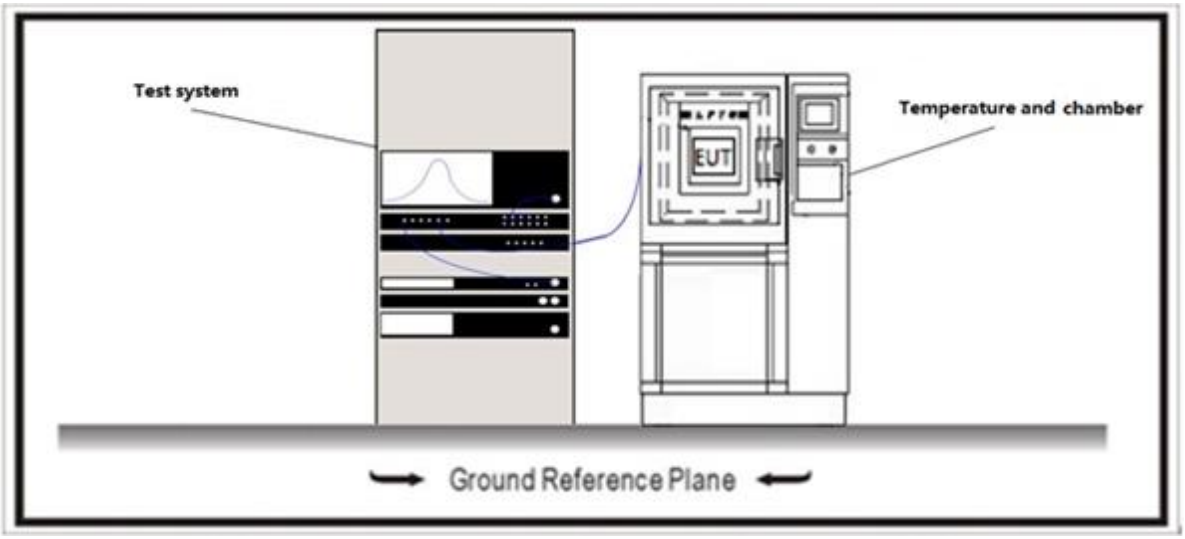
4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d)
RF Output power (Detection methods)	Limit(dB)
RF Output power(Average detector)	30dBc(Note1)
RF Output power(PK detector)	20dBc(Note2)

Note 1: If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

Note 2: If the maximum peak conducted output power procedure was used, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

4.2.2 Test Setup

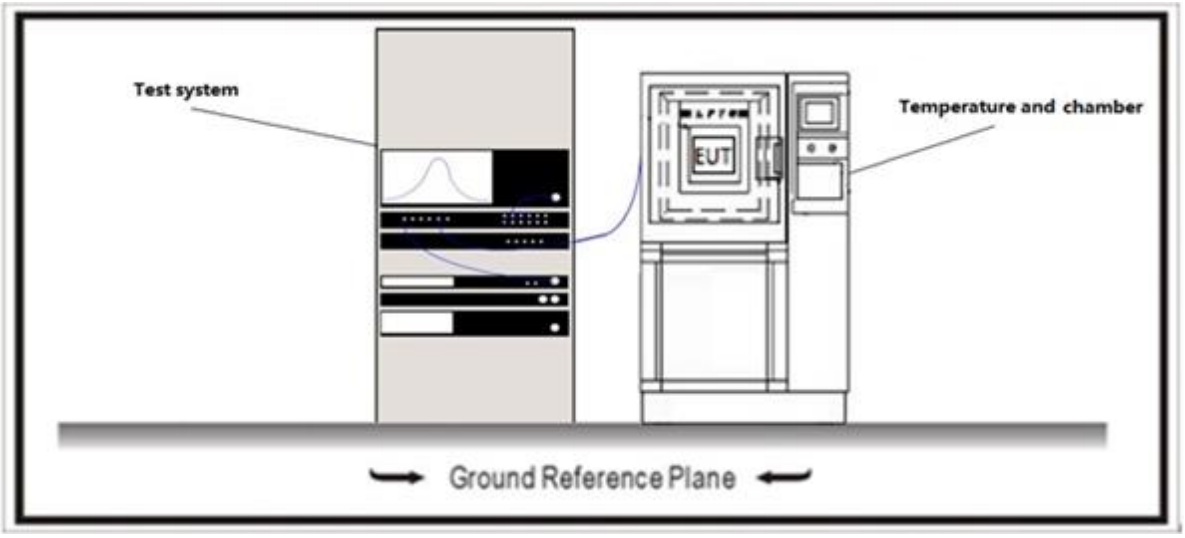


4.2.3 Test Procedure

References Rule			Chapter	Description
☒	ANSI C63.10		11.11	Emissions in non-restricted frequency bands
	☒	ANSI C63.10	11.11.1	General
	☒	ANSI C63.10	11.11.2	Reference level measurement
	☒	ANSI C63.10	11.11.3	Emission level measurement

4.3 Duty cycle	VERDICT: PASS

4.3.1 Limit
N/A

4.3.2 Test Setup


4.3.3 Test Procedure			
References Rule		Chapter	Description
☒	ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

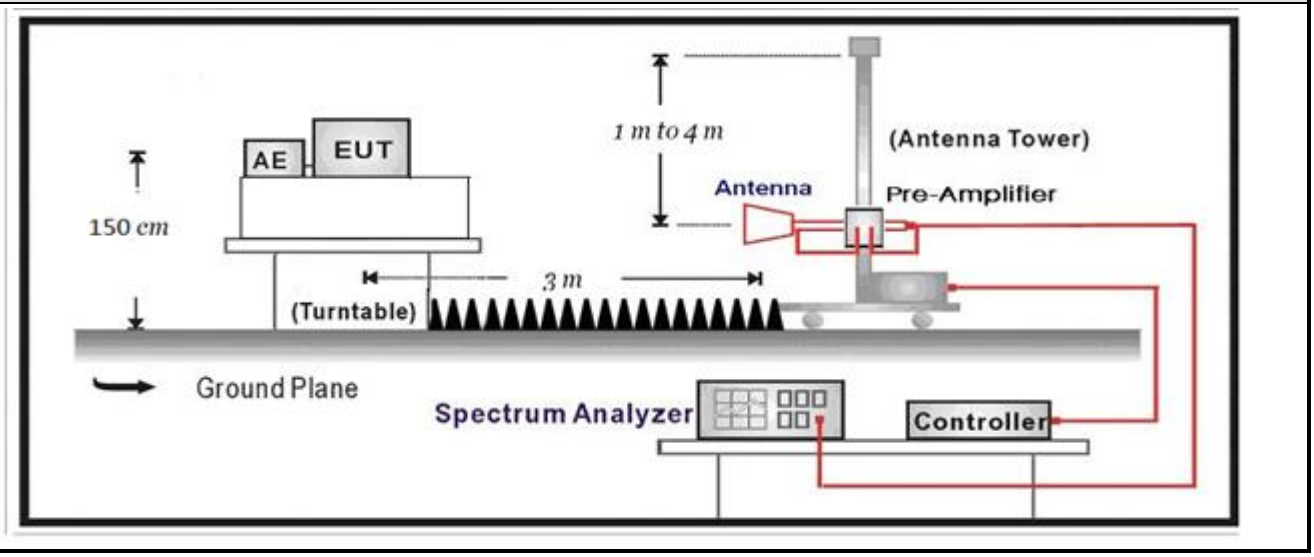
4.4 Radiated Emission Band Edge — VERDICT: PASS

4.4.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(d) , 15.205, 15.209			
Frequency bands (MHz)	Detector	Limit (dBμV/m)	RBW (MHz)	Distance (m)
2310-2390 2483.5-2500	PK	74	1	3
	AV	54	1	3
Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.				

4.4.2 Test Setup

Above 1GHz Test Setup:



4.4.3 Test Procedure

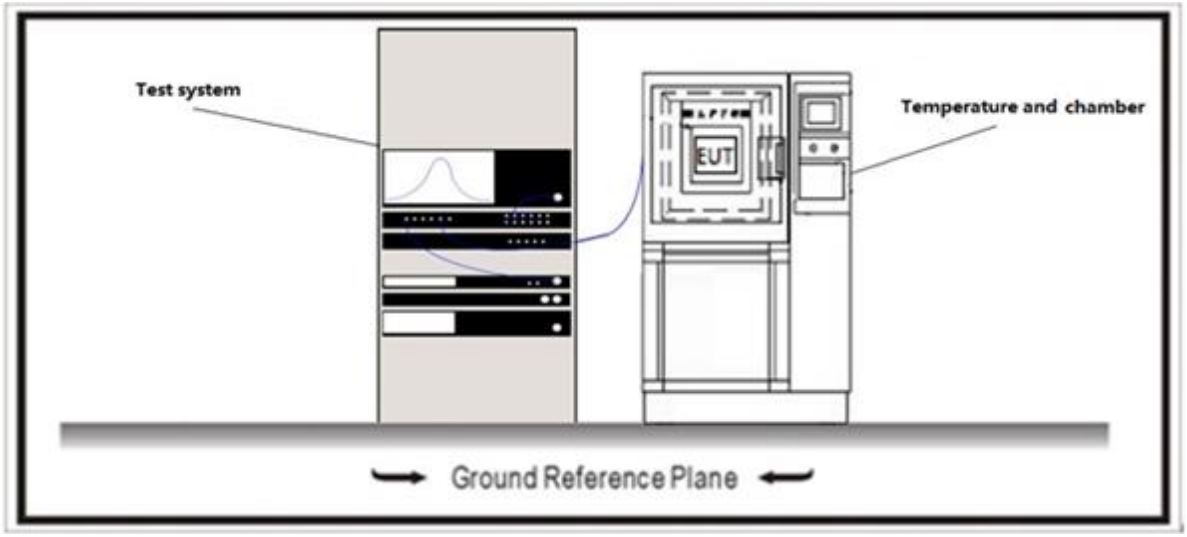
	References Rule	Chapter	Description
☒	ANSI C63.10	6.10	Band-edge testing
	☒ ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	☐ ANSI C63.10	6.10.6	Marker-delta method
☒	ANSI C63.10	11.12	Emissions in restricted frequency bands
	☒ ANSI C63.10	11.12.1	Radiated emission measurements
	☒ ANSI C63.10	6.3	Radiated spurious emission test
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

4.5 DTS Bandwidth	VERDICT: PASS

4.5.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(2)
Systems using digital modulation techniques operate in the2400-2483.5 MHz .The minimum 6 dB bandwidth shall be at least 500 kHz	
Standard	ANSI C63.10 Paragraph 6.7
The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs. The occupied bandwidth should within the required frequency range.	

4.5.2 Test Setup



4.5.3 Test Procedure

	Reference Rule		Chapter	Description
☒	ANSI C63.10		11.8	DTS bandwidth
	☐	ANSI C63.10	11.8.1	Option 1
	☒	ANSI C63.10	11.8.2	Option 2
☒	ANSI C63.10		6.9	Occupied bandwidth
	☐	ANSI C63.10	6.9.2	relative measurement procedure
	☒	ANSI C63.10	6.9.3	power bandwidth (99%) measurement procedure

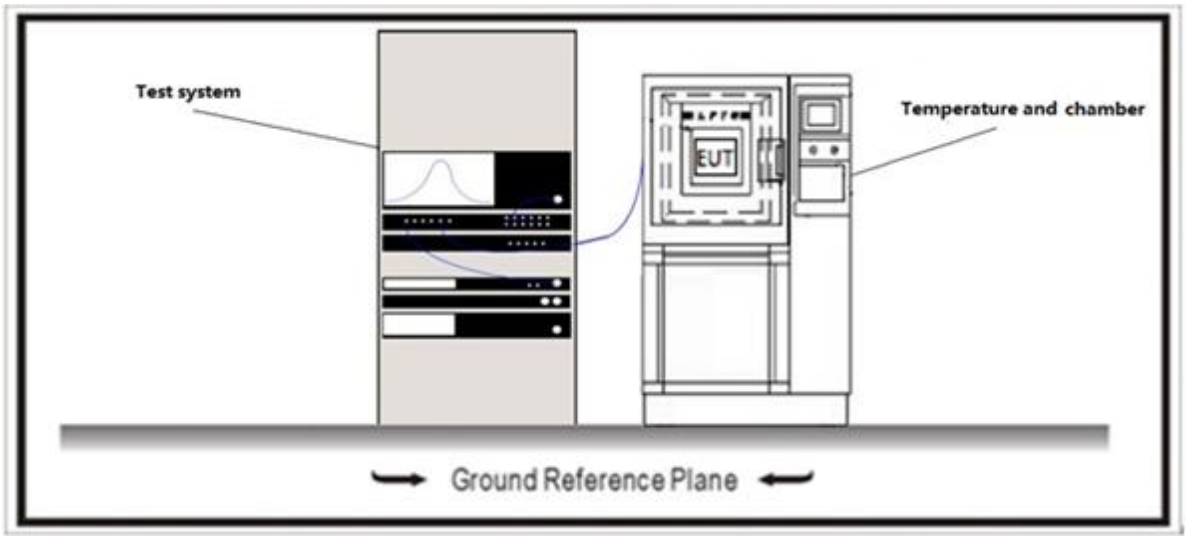
4.6 Fundamental emission output power	VERDICT: PASS

4.6.1 Limit

Standard			FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
☒	GTX ＜6dBi		Pout≤30dBm
☐	GTX ＞6dBi		
	☐	Non-Fix point-point	Pout≤30-(GTX -6)
	☐	Fix point-point	Pout≤30-[(GTX-6)]/3
	☐	Point-to-multipoint	Pout≤30-(GTX-6)
	☐	Overlap Beams	Pout≤30-[(GTX-6)]/3
	☐	Avgregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
	☐	single directional beam	Pout≤30-[(GTX-6)]/3+8dB

Note 1 : GTX directional gain of transmitting antennas.
Note 2 : Pout is maximum conducted output power .

4.6.2 Test Setup



4.6.3 Test Procedure

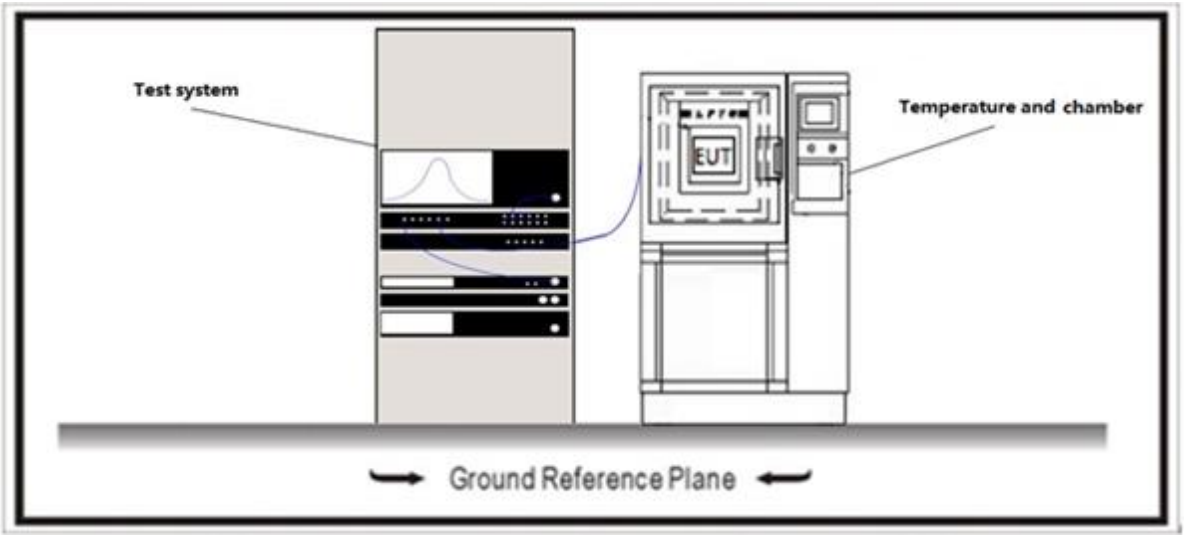
	References Rule	Chapter	Description
☒	ANSI C63.10	11.9	Fundamental emission output power
	☐ ANSI C63.10	11.9.1	Maximum peak conducted output power
	☐ ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth
	☐ ANSI C63.10	11.9.1.2	Integrated band power method
	☐ ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method
	☒ ANSI C63.10	11.9.2	Maximum conducted (average) output power
	☐ ANSI C63.10	11.9.2.2	Measurement using a spectrum analyzer (SA)
	☐ ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle≥98%)
	☐ ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle≥98%)
	☐ ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle≤98%)
	☐ ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle≤98%)
	☐ ANSI C63.10	11.9.2.2.4	Method AVGSA-3
	☐ ANSI C63.10	11.9.2.2.5	Method AVGSA-3A
	☒ ANSI C63.10	11.9.2.3	Measurement using a power meter (PM)
	☒ ANSI C63.10	11.9.2.3.1	Method AVGPM
	☐ ANSI C63.10	11.9.2.3.2	Method AVGPM-G

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)e)	Spatial stream
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☒	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

4.7 Power Density	VERDICT: PASS

4.7.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.247 (e)
Power Spectral Density≤8dBm/3kHz	

4.7.2 Test Setup



4.7.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle≥98%)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle≥98%)
	☐	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle＜98%)
	☐	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle＜98%)
	☐	ANSI C63.10	11.10.7	Method AVGPSD-3
	☐	ANSI C63.10	11.10.8	Method AVGPSD-3A

Directional Gain Calculations for In-Band test method				
	References Rule		Chapter	Description
☐	KDB 662911		F2)a)	Basic methodology
	☐	KDB 662911	F2)a) (i)	transmit signals are correlated
	☐	KDB 662911	F2)a) (ii)	transmit signals are uncorrelated
☐	KDB 662911		F2)b)	Sectorized antenna systems.
☐	KDB 662911		F2)c)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (i)	Cross-polarized antennas
	☐	ANSI C63.10	F2)c) (ii)	Multiple antennas
☐	KDB 662911		F2)e)	Spatial stream
	☐	KDB 662911	F2)e) (i)	Antennas have the same gain
	☐	KDB 662911	F2)e) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)e) (iii)	Antenna have the different gain with more than one spatial stream
☒	KDB 662911		F2)f)	Cyclic Delay Diversity (CDD)
	☒	KDB 662911	F2)f) (i)	Antennas have the same gain
	☐	KDB 662911	F2)f) (ii)	Antenna have the different gain with one spatial stream
	☐	KDB 662911	F2)f) (iii)	Antenna have the different gain with more than one spatial stream

4.8 AC Power Line Conducted Emission	VERDICT: PASS

4.8.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207; RSS-Gen Issue 5 Paragraph 8.8.	
Frequency range [MHz]	Limit: QP [dB(μV)[1)]]	Limit: AV [dB(μV)[1)]]
0,15 - 0,50	66 – 56 [2)]	56 - 46 [2)]
0,50 - 5,0	56	46
5,0 - 30	60	50

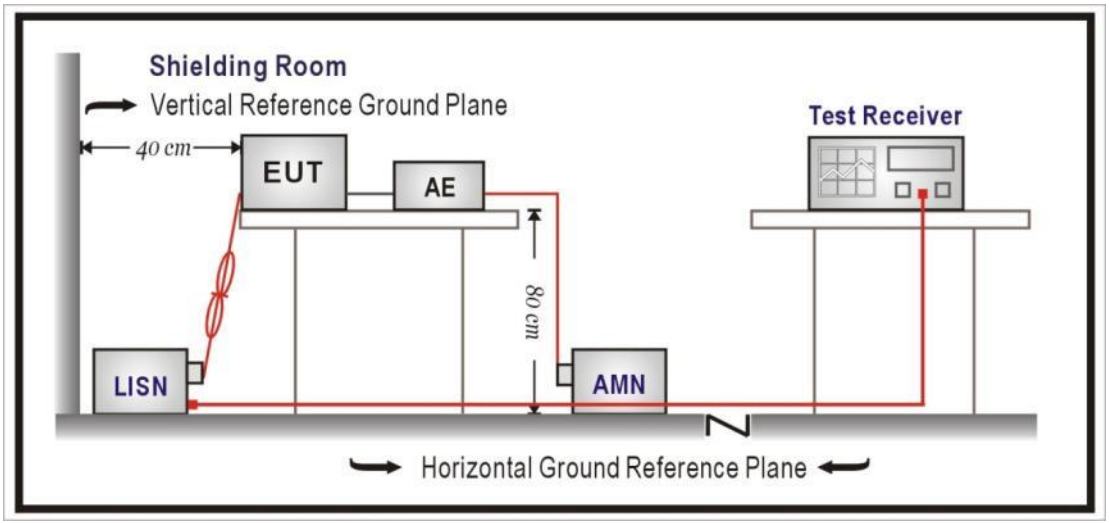
[1)] At the transition frequency, the lower limit applies.

[2)] The limit decreases linearly with the logarithm of the frequency.

NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.

NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.8.2 Test Setup



4.8.3 Test Procedure

	References Rule	Chapter	Item
☒	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.9 Antenna Requirement	VERDICT: PASS

4.9.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.	

4.9.2 Antenna Connector Construction:	
☐	The use of a permanently attached antenna
☐	The antenna use of a unique coupling to the intentional radiator
☒	The use of a nonstandard antenna jack or electrical connector
Please refer to the attached document “Internal Photograph” to show the antenna connector.	

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

6 TEST RESULT

Appendix A: DTS Bandwidth

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.120	2407.440	2415.560	0.5	PASS
		2437	8.480	2433.040	2441.520	0.5	PASS
		2462	9.080	2457.440	2466.520	0.5	PASS
11G	Ant1	2412	13.880	2404.440	2418.320	0.5	PASS
		2437	15.040	2429.880	2444.920	0.5	PASS
		2462	16.280	2453.840	2470.120	0.5	PASS
11N20SISO	Ant1	2412	15.880	2403.600	2419.480	0.5	PASS
		2437	15.920	2429.520	2445.440	0.5	PASS
		2462	17.160	2453.200	2470.360	0.5	PASS
11N40SISO	Ant1	2422	35.600	2404.480	2440.080	0.5	PASS
		2437	34.160	2420.360	2454.520	0.5	PASS
		2452	35.040	2434.480	2469.520	0.5	PASS
Note: We have evaluated SISO, MIMO mode, shown in the report is the worst data.							

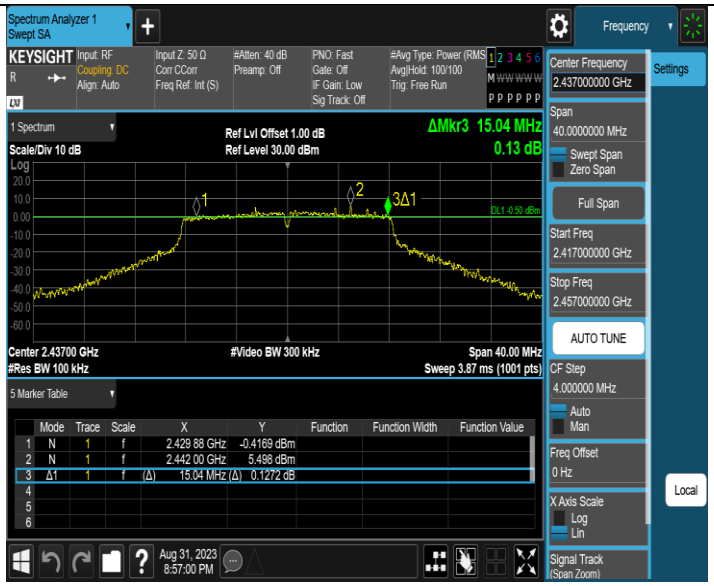
11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462

11G_Ant1_2412

11G_Ant1_2437



11G_Ant1_2462

11N20SISO_Ant1_2412

11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437

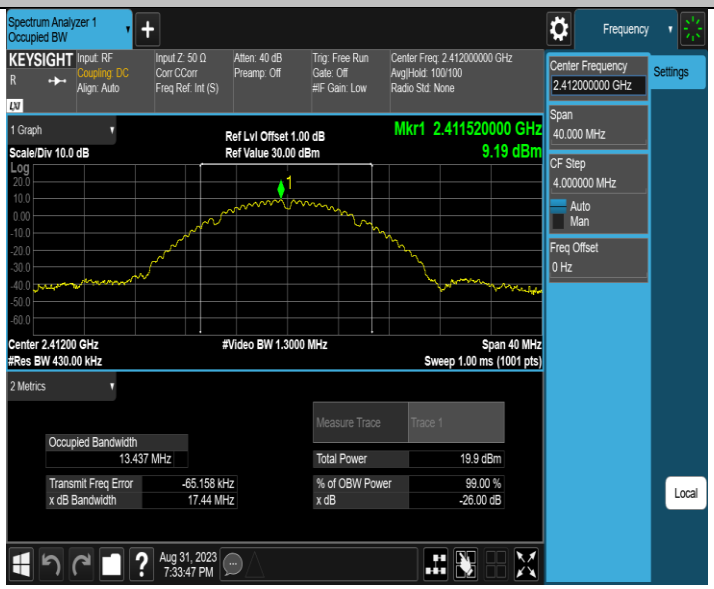
11N40SISO_Ant1_2452

Appendix B: Occupied Channel Bandwidth

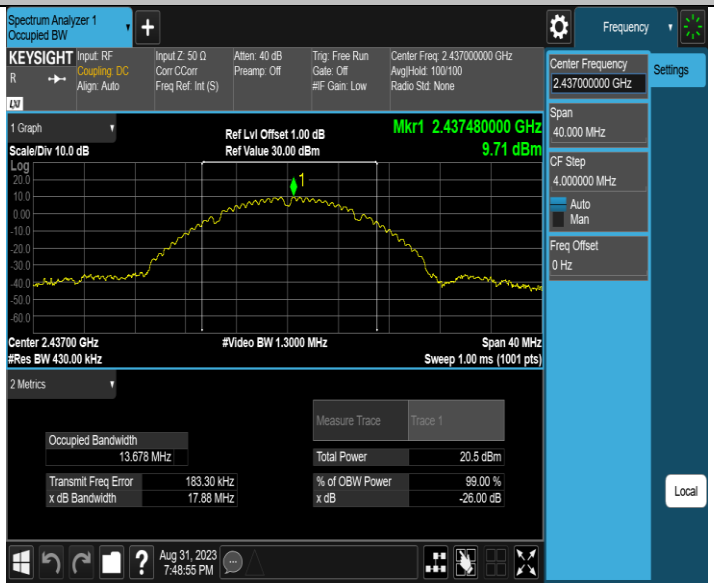
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]
11B	Ant1	2412	13.437	2405.2163	2418.6533	N/A
		2437	13.678	2430.3443	2444.0223	N/A
		2462	14.146	2454.8953	2469.0413	N/A
11G	Ant1	2412	16.690	2403.6417	2420.3317	N/A
		2437	16.805	2428.6690	2445.4740	N/A
		2462	17.059	2453.4260	2470.4850	N/A
11N20SISO	Ant1	2412	17.817	2403.0930	2420.9100	N/A
		2437	17.998	2428.0661	2446.0641	N/A
		2462	18.273	2452.8448	2471.1178	N/A
11N40SISO	Ant1	2422	36.408	2403.8422	2440.2502	N/A
		2437	36.233	2418.9022	2455.1352	N/A
		2452	36.244	2433.8575	2470.1015	N/A

Note: We have evaluated SISO, MIMO mode, shown in the report is the worst data.

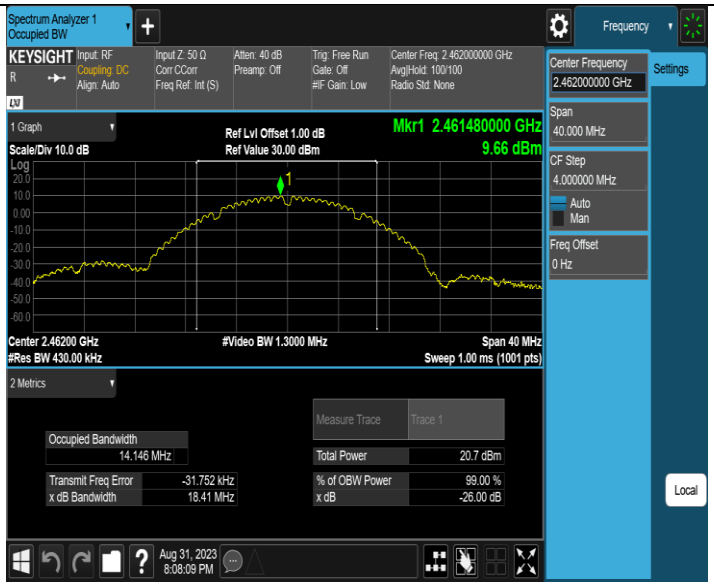
11B_Ant1_2412



11B_Ant1_2437



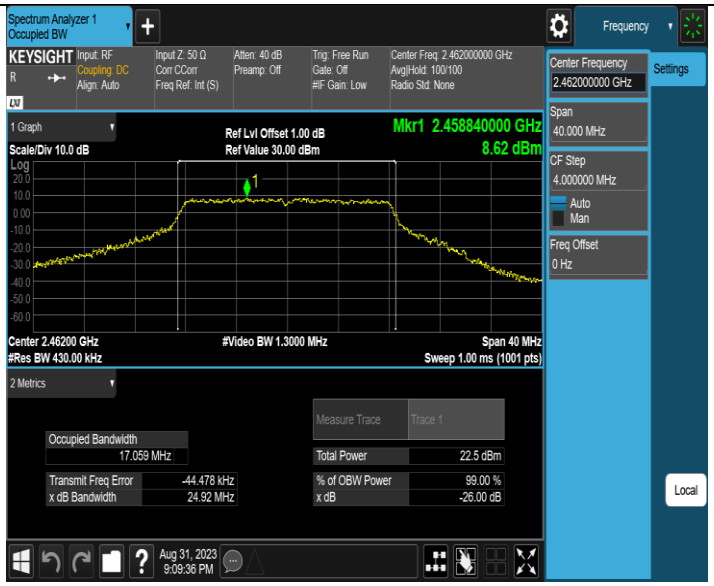
11B_Ant1_2462



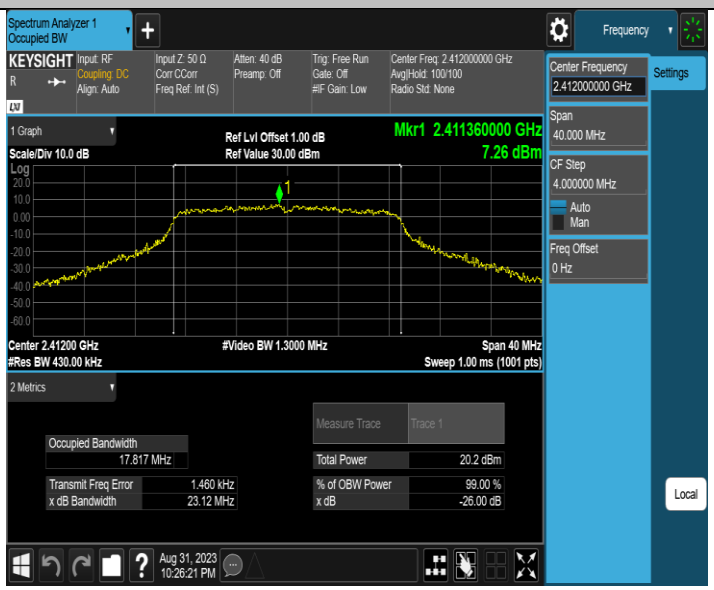
11G_Ant1_2412

11G_Ant1_2437

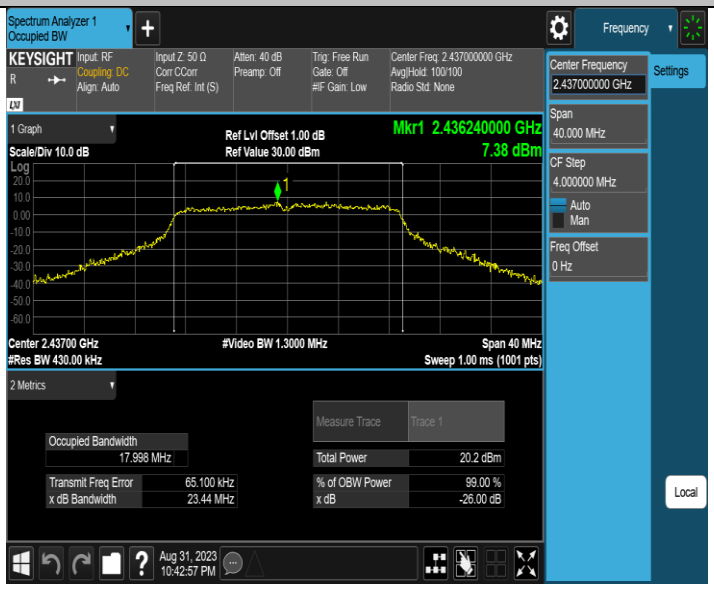
11G_Ant1_2462



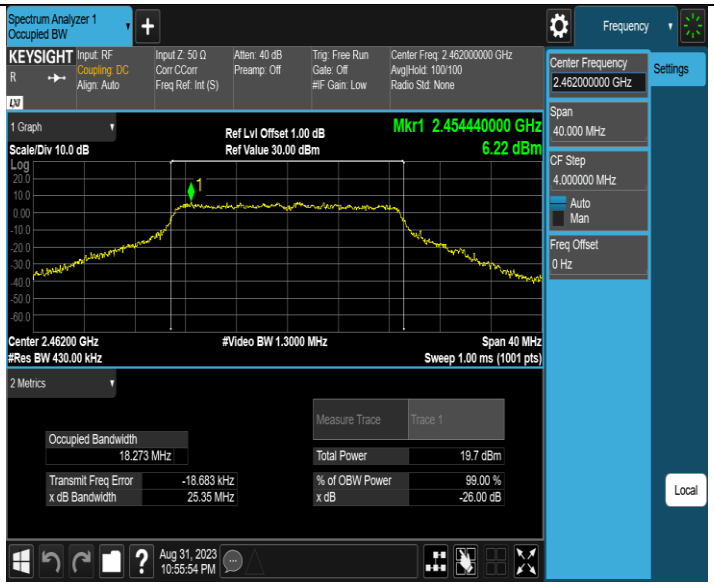
11N20SISO_Ant1_2412



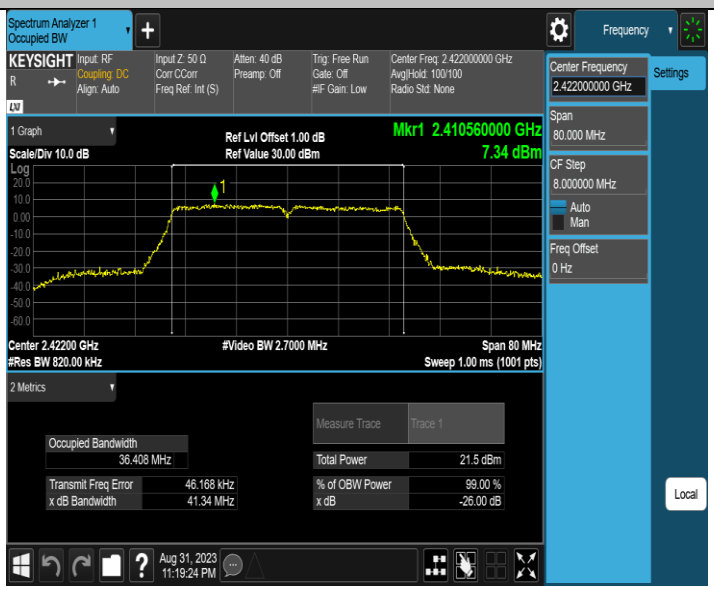
11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

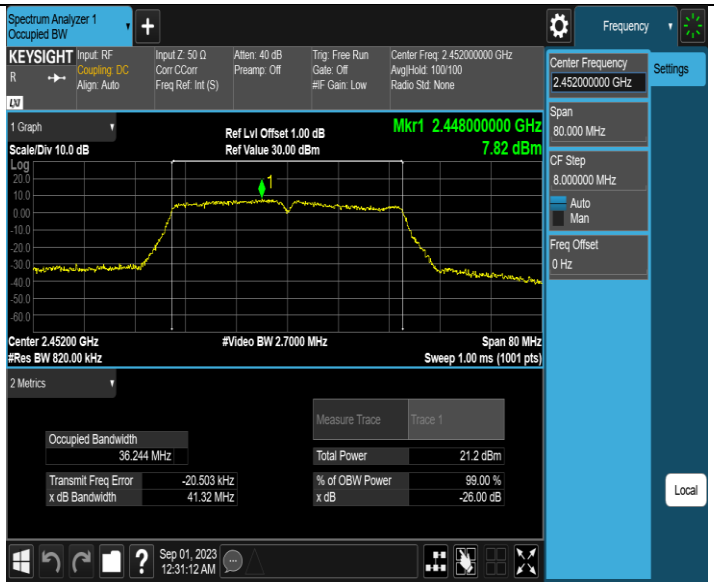


11N40SISO_Ant1_2422



11N40SISO_Ant1_2437

11N40SISO_Ant1_2452


Spectrum Analyzer 1
Occupied BW
Frequency
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corr CCorr
Freq Ref: Int (S)
Atten: 40 dB
Preamp: Off
Trig: Free Run
Gate: Off
#IF Gain: Low
Center Freq: 2.452000000 GHz
Avg|Hold: 100/100
Radio Std: None
1 Graph
Ref Lvl Offset 1.00 dB
Ref Value 30.00 dBm
Mkr1 2.448000000 GHz
7.82 dBm
Scale/Div 10.0 dB
Log
Center 2.45200 GHz
#Res BW 820.00 kHz
#Video BW 2.7000 MHz
Span 80 MHz
Sweep 1.00 ms (1001 pts)
2 Metrics
Occupied Bandwidth
36.244 MHz
Transmit Freq Error
-20.503 kHz
x dB Bandwidth
41.32 MHz
Measure Trace
Trace 1
Total Power
21.2 dBm
% of OBW Power
99.00 %
x dB
-26.00 dB
Center Frequency
2.452000000 GHz
Settings
Span
80.000 MHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Local
Sep 01, 2023
12:31:12 AM

Appendix C: Maximum conducted output power

SISO Antenna1：							
Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
Mode 1	1	2412	17.50	18.90	≤30	≤36	Pass
	6	2437	17.49	18.89	≤30	≤36	Pass
	11	2462	17.51	18.91	≤30	≤36	Pass
Mode 2	1	2412	16.05	17.45	≤30	≤36	Pass
	6	2437	15.98	17.38	≤30	≤36	Pass
	11	2462	15.79	17.19	≤30	≤36	Pass
Mode 3	1	2412	13.73	15.13	≤30	≤36	Pass
	6	2437	13.83	15.23	≤30	≤36	Pass
	11	2462	13.89	15.29	≤30	≤36	Pass
Mode 4	3	2422	13.76	15.16	≤30	≤36	Pass
	6	2437	13.92	15.32	≤30	≤36	Pass
	9	2452	14.17	15.57	≤30	≤36	Pass
Note 1: EIRP Power = Conducted Power + Antenna gain							
Note 2: The Antenna gain please refer to clause 1.2							

SISO Antenna2：

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
Mode 1	1	2412	17.45	19.45	≤30	≤36	Pass
	6	2437	17.44	19.44	≤30	≤36	Pass
	11	2462	17.47	19.47	≤30	≤36	Pass
Mode 2	1	2412	15.88	17.88	≤30	≤36	Pass
	6	2437	15.86	17.86	≤30	≤36	Pass
	11	2462	15.84	17.84	≤30	≤36	Pass
Mode 3	1	2412	13.81	15.81	≤30	≤36	Pass
	6	2437	13.85	15.85	≤30	≤36	Pass
	11	2462	13.79	15.79	≤30	≤36	Pass
Mode 4	3	2422	13.86	15.86	≤30	≤36	Pass
	6	2437	13.90	15.90	≤30	≤36	Pass
	9	2452	13.95	15.95	≤30	≤36	Pass

Note 1: EIRP Power = Conducted Power + Antenna gain

Note 2: The Antenna gain please refer to clause 1.2

CDD Antenna1+2：

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)			EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
			ANT1	ANT2	ANT1+2				
Mode 3	1	2412	13.88	13.76	16.83	18.83	≤30	≤36	Pass
	6	2437	13.91	13.87	16.90	18.90	≤30	≤36	Pass
	11	2462	13.82	13.80	16.82	18.82	≤30	≤36	Pass
Mode 4	3	2422	13.81	13.79	16.81	18.81	≤30	≤36	Pass
	6	2437	13.78	13.84	16.82	18.82	≤30	≤36	Pass
	9	2452	13.86	13.81	16.85	18.85	≤30	≤36	Pass

Note 1: EIRP Power = Conducted Power + Antenna gain

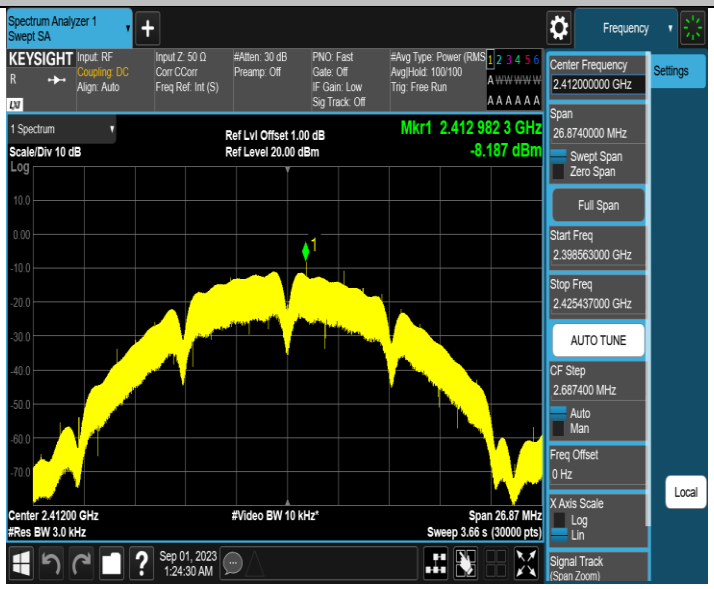
Note 2: The Antenna gain please refer to clause 1.2

Appendix D: Maximum power spectral density

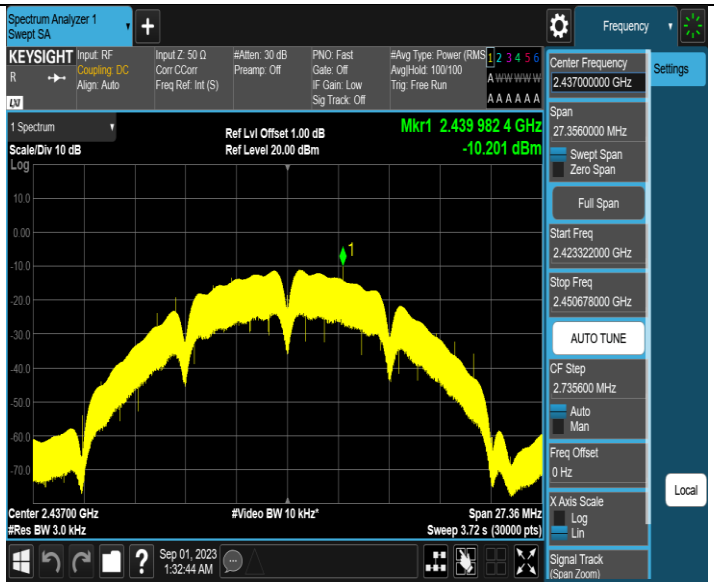
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	[dBm/3kHz]	Verdict
11B	Ant1	2412	-8.19	≤8.00	PASS
		2437	-10.2	≤8.00	PASS
		2462	-10.33	≤8.00	PASS
11G	Ant1	2412	-15.43	≤8.00	PASS
		2437	-15.81	≤8.00	PASS
		2462	-15.82	≤8.00	PASS
11N20SISO	Ant1	2412	-18.18	≤8.00	PASS
		2437	-18.24	≤8.00	PASS
		2462	-18.62	≤8.00	PASS
11N40SISO	Ant1	2422	-21.19	≤8.00	PASS
		2437	-20.7	≤8.00	PASS
		2452	-19.4	≤8.00	PASS
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	[dBm/3kHz]	Verdict
11N20MIMO	Ant1+2	2412	-18.18	≤4.99	PASS
		2437	-18.24	≤4.99	PASS
		2462	-18.62	≤4.99	PASS
11N40MIMO	Ant1+2	2422	-21.19	≤4.99	PASS
		2437	-20.7	≤4.99	PASS
		2452	-19.4	≤4.99	PASS

Note 1: MIMO PSD Limit = 8dBm/3KHz - 10*LOG(Antenna number)
Note 2: We have evaluated SISO, MIMO mode, shown in the report is the worst data.

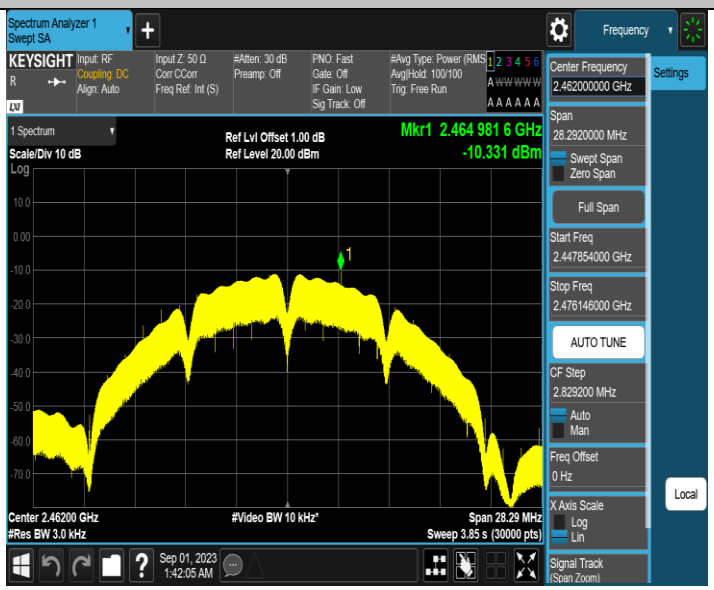
11B_Ant1_2412



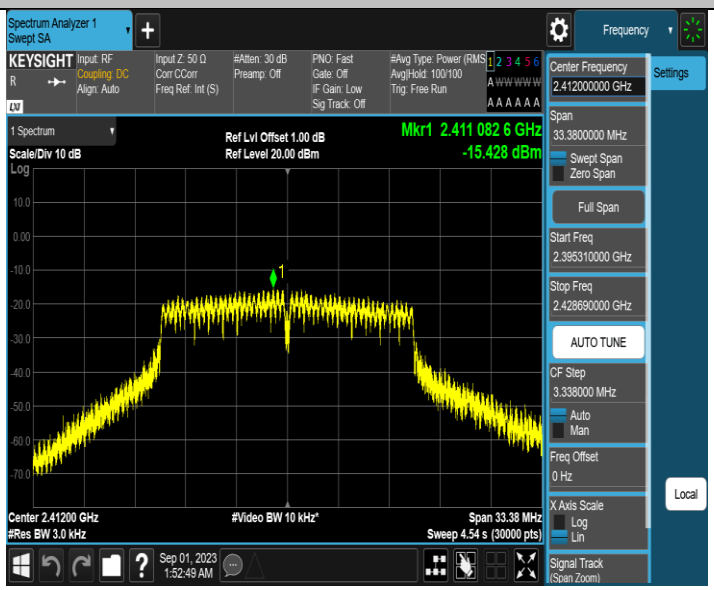
11B_Ant1_2437



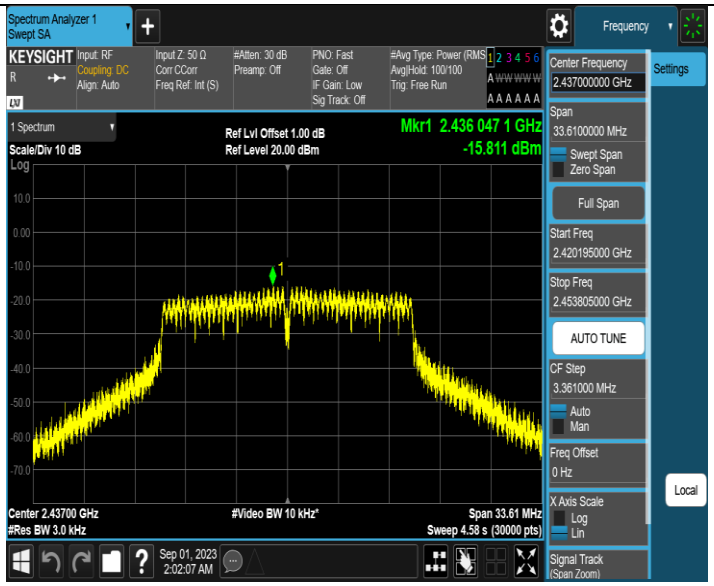
11B_Ant1_2462



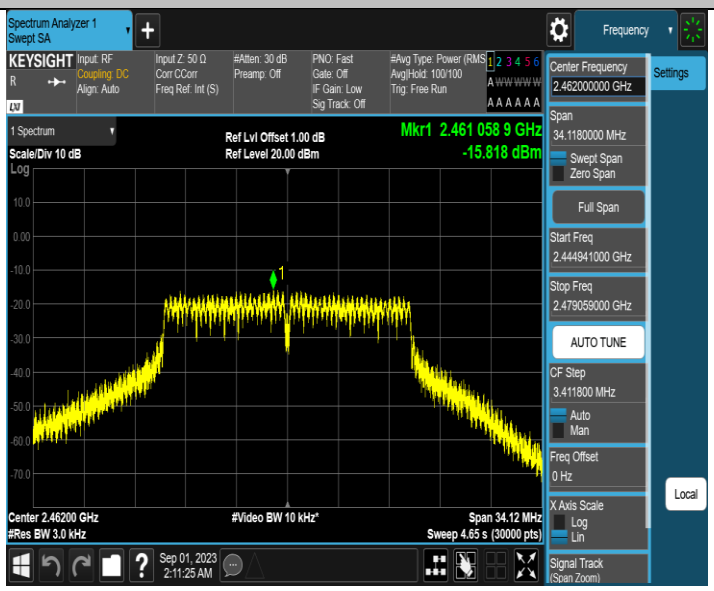
11G_Ant1_2412



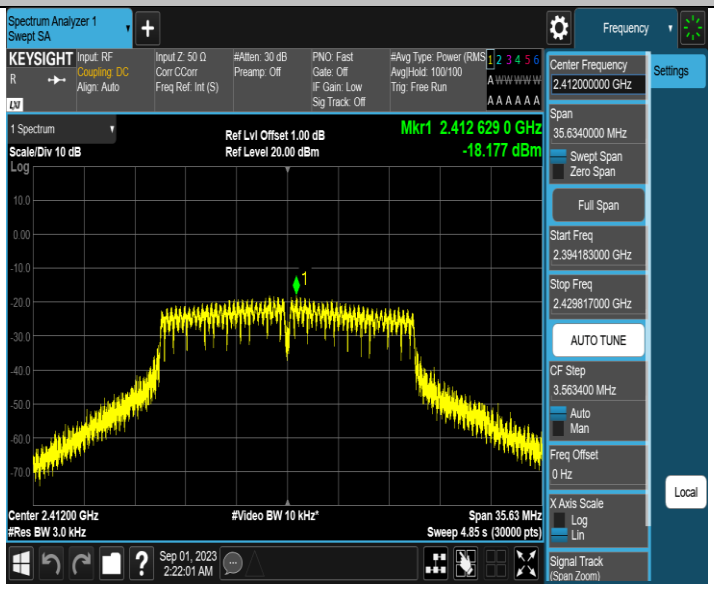
11G_Ant1_2437



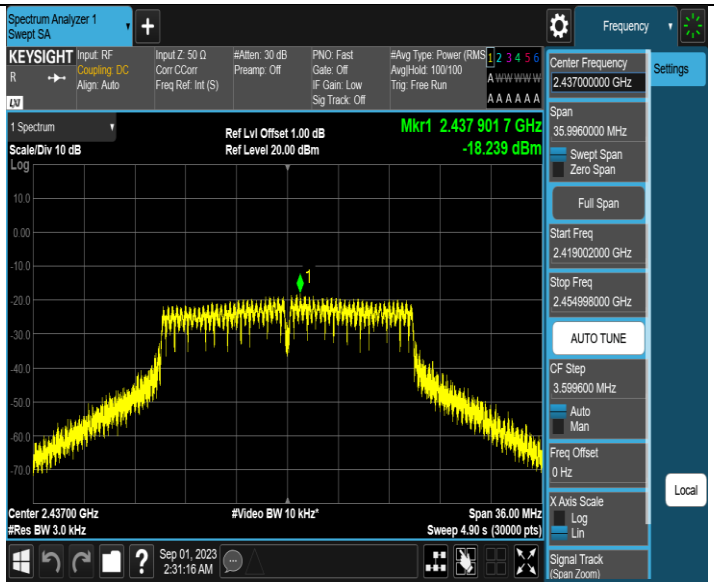
11G_Ant1_2462



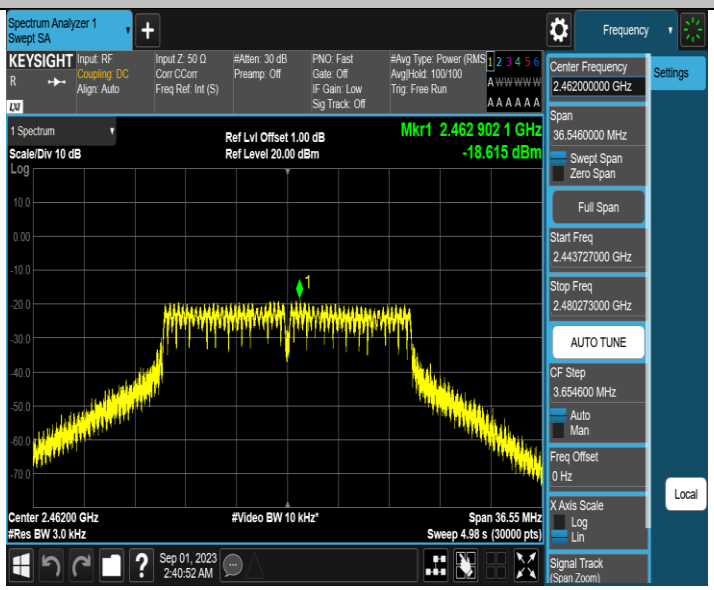
11N20SISO_Ant1_2412



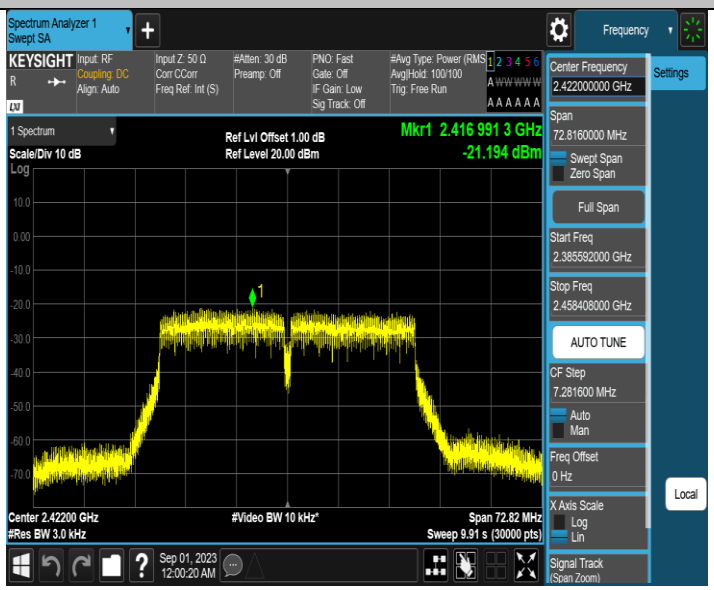
11N20SISO_Ant1_2437



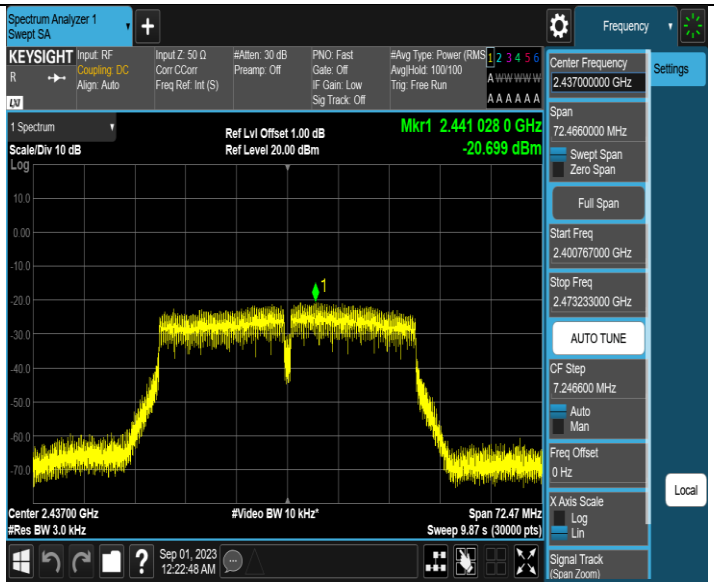
11N20SISO_Ant1_2462



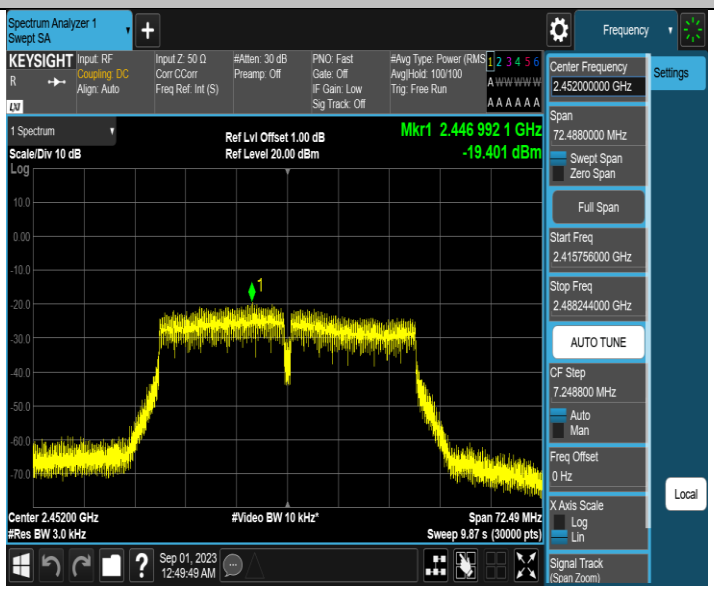
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437

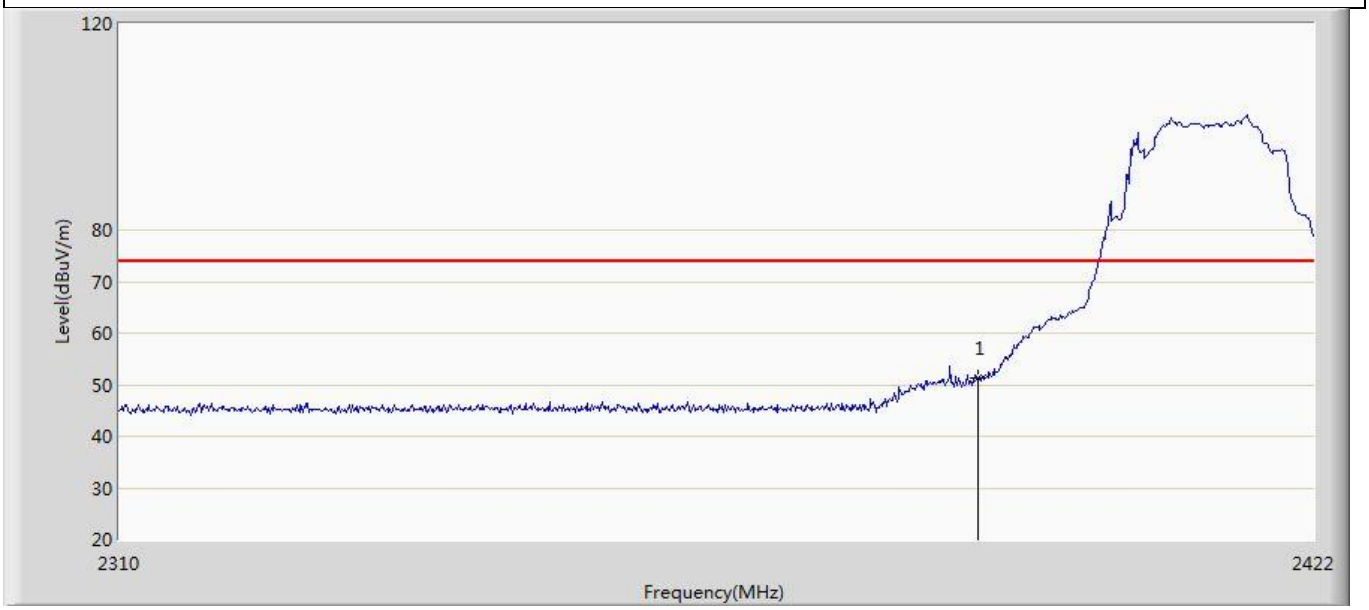


11N40SISO_Ant1_2452



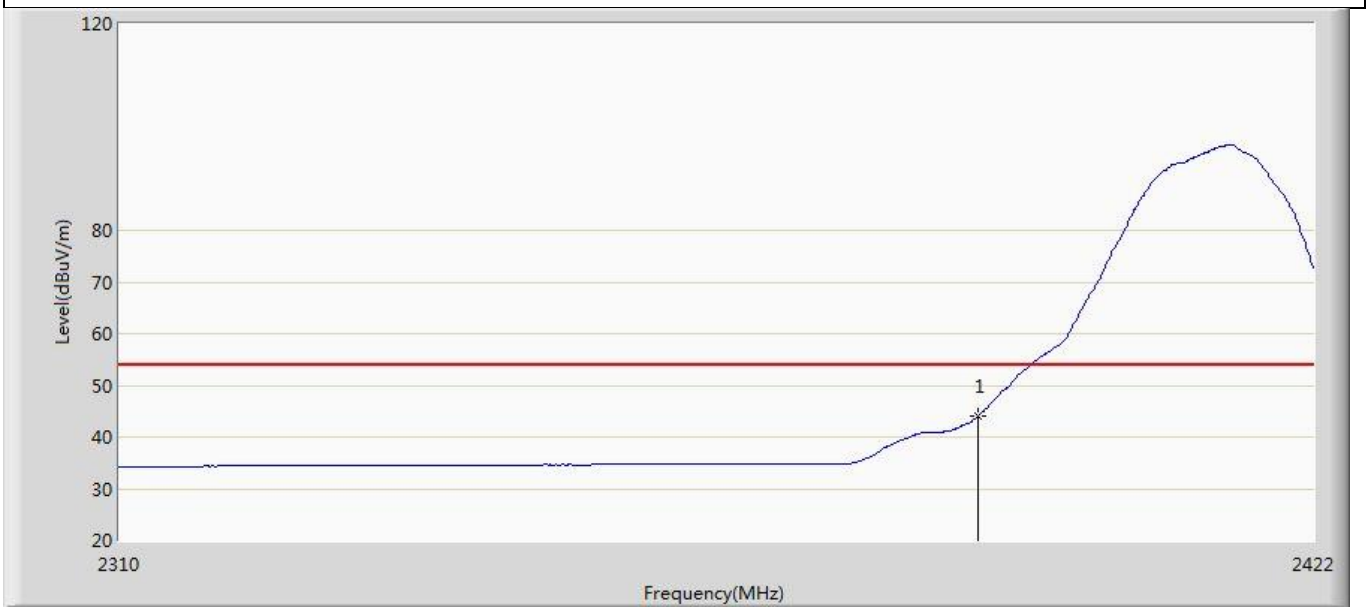
Appendix E: Band edge measurements

Profile: 2360694R	Page No.: 1
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2412MHz by 802.11b with Ant1	



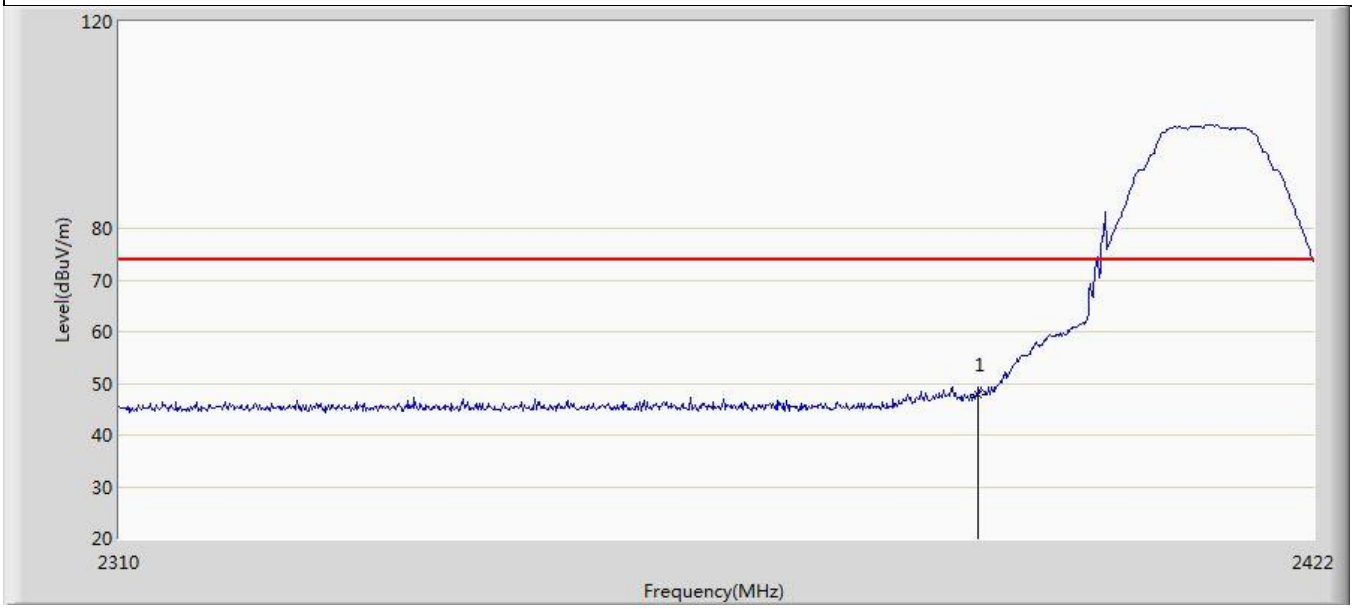
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	51.261	17.148	-22.739	74.000	34.113	PK

Profile: 2360694R	Page No.: 2
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2412MHz by 802.11b with Ant1	



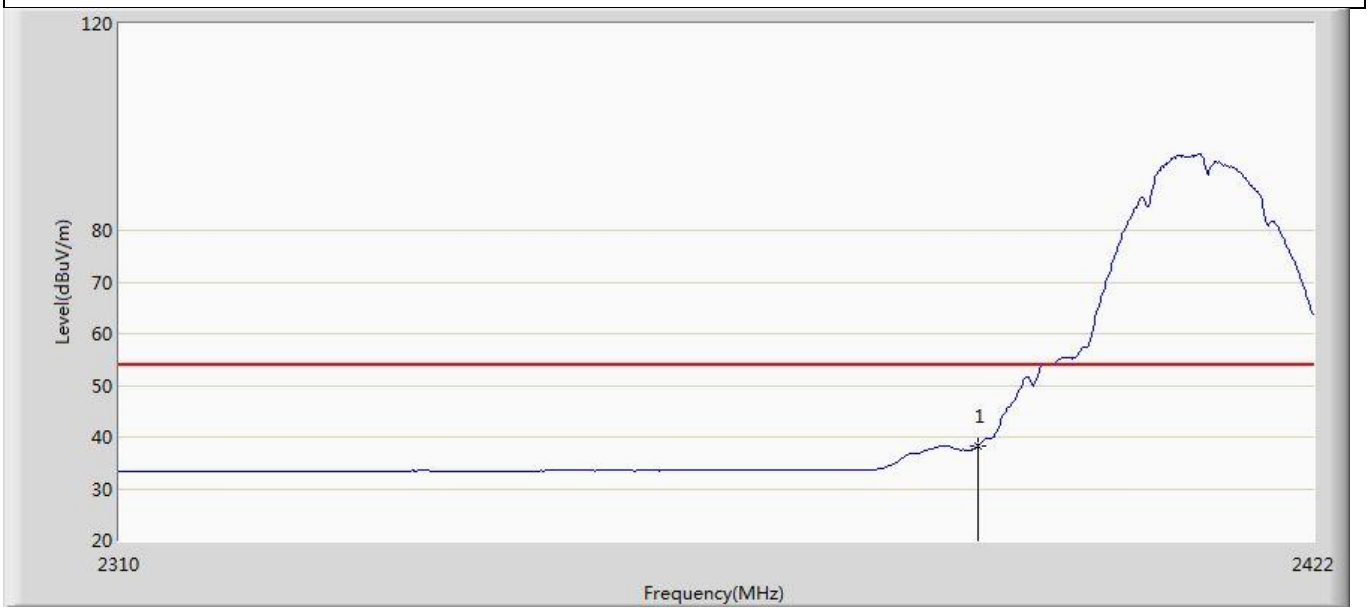
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.056	9.943	-9.944	54.000	34.113	AV

Profile: 2360694R	Page No.: 3
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2412MHz by 802.11b with Ant1	



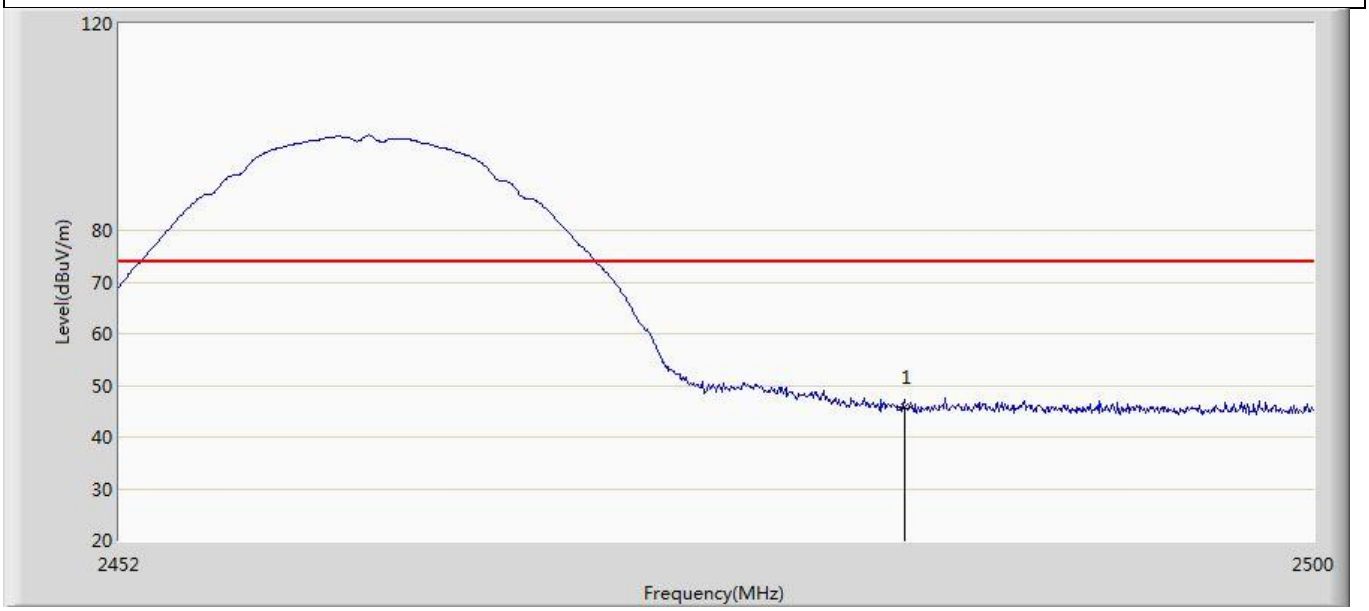
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.786	13.673	-26.214	74.000	34.113	PK

Profile: 2360694R	Page No.: 4
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2412MHz by 802.11b with Ant1	



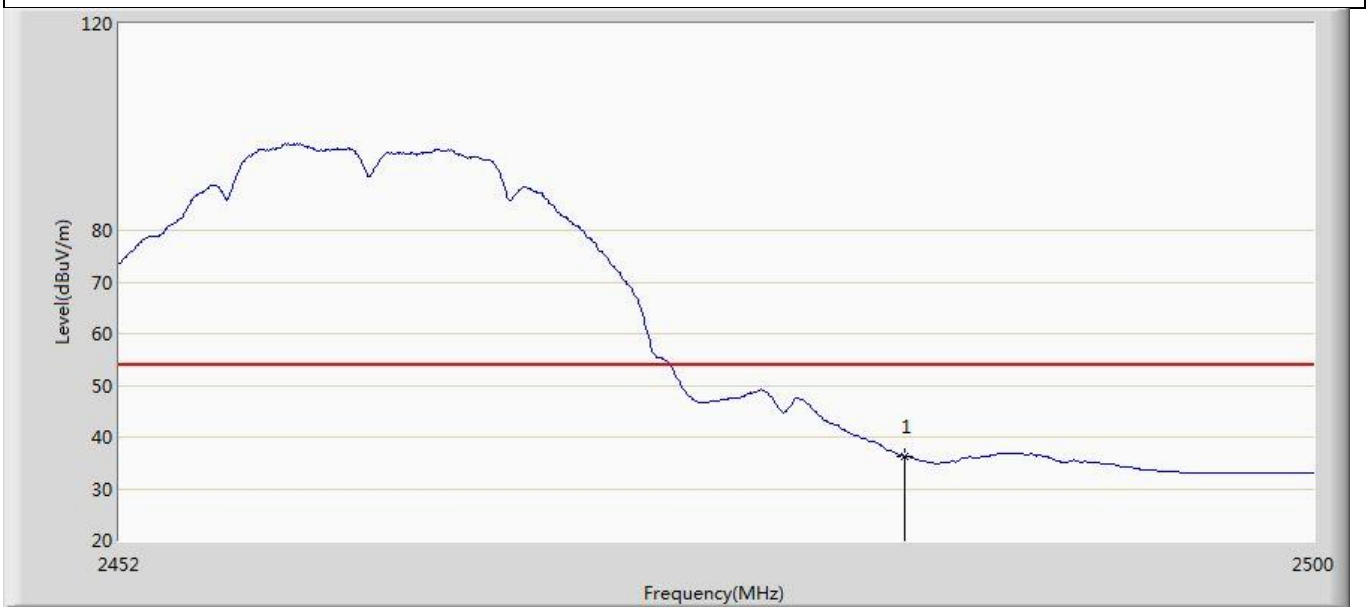
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	38.250	4.137	-15.750	54.000	34.113	AV

Profile: 2360694R	Page No.: 5
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2462MHz by 802.11b with Ant1	



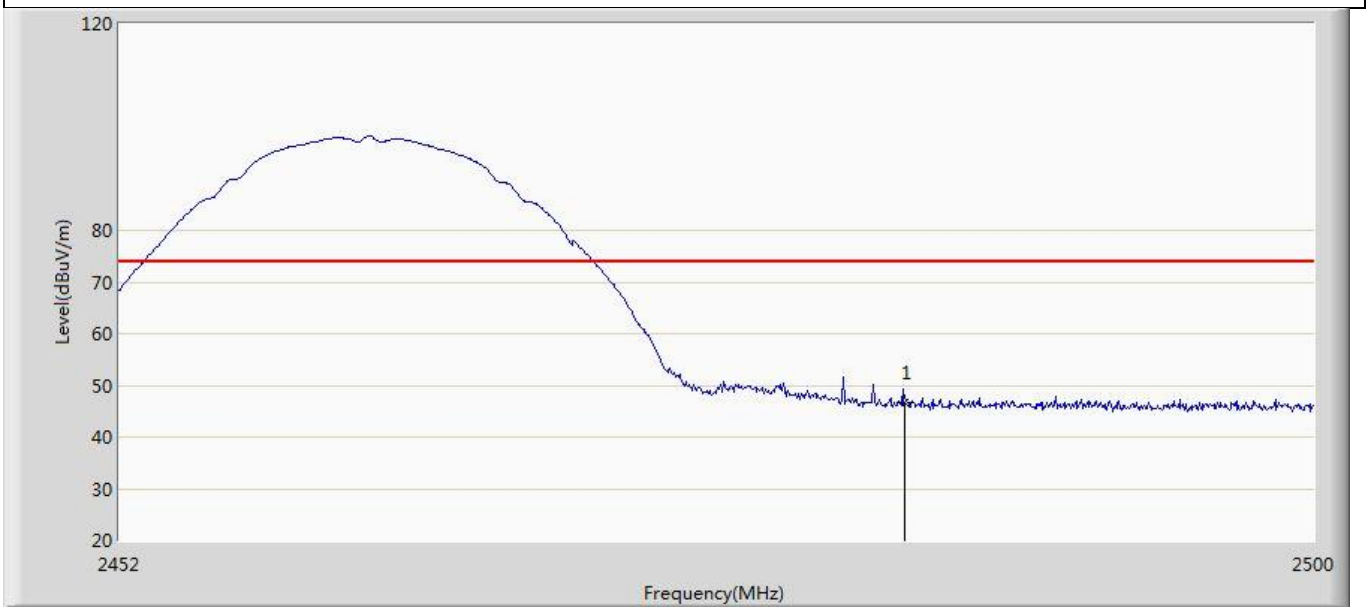
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.670	11.154	-28.330	74.000	34.516	PK

Profile: 2360694R	Page No.: 6
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2462MHz by 802.11b with Ant1	



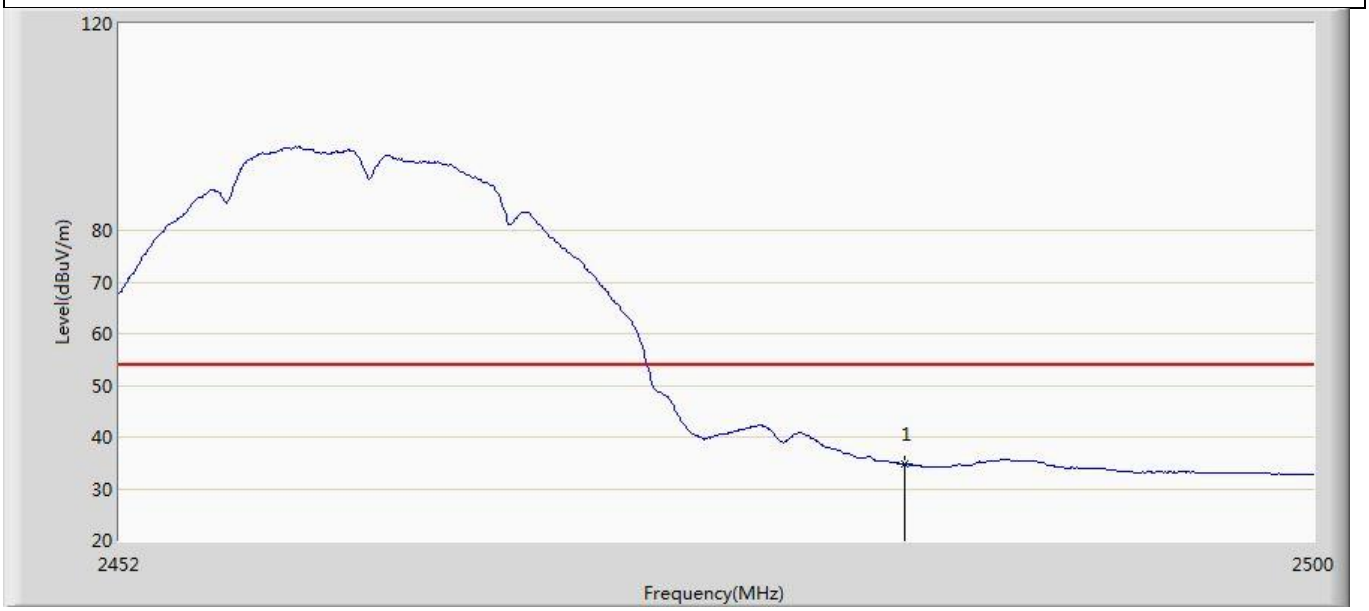
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	36.209	1.693	-17.791	54.000	34.516	AV

Profile: 2360694R	Page No.: 7
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2462MHz by 802.11b with Ant1	



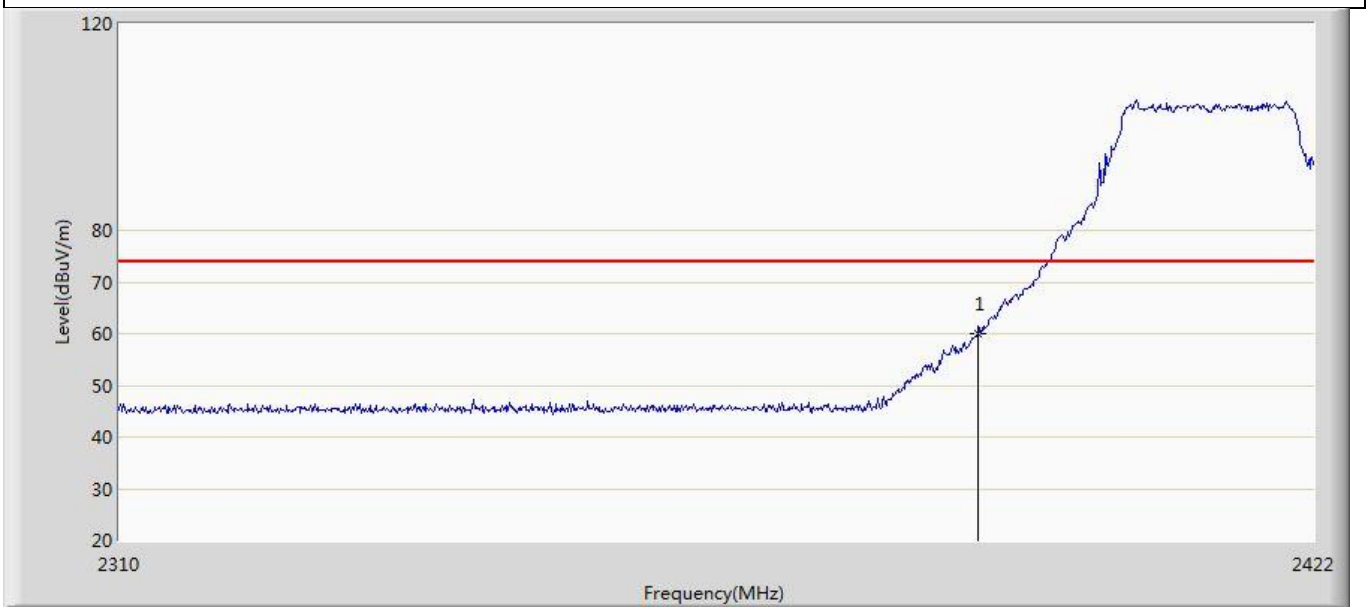
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	46.595	12.079	-27.405	74.000	34.516	PK

Profile: 2360694R	Page No.: 8
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 1：Transmit at 2462MHz by 802.11b with Ant1	



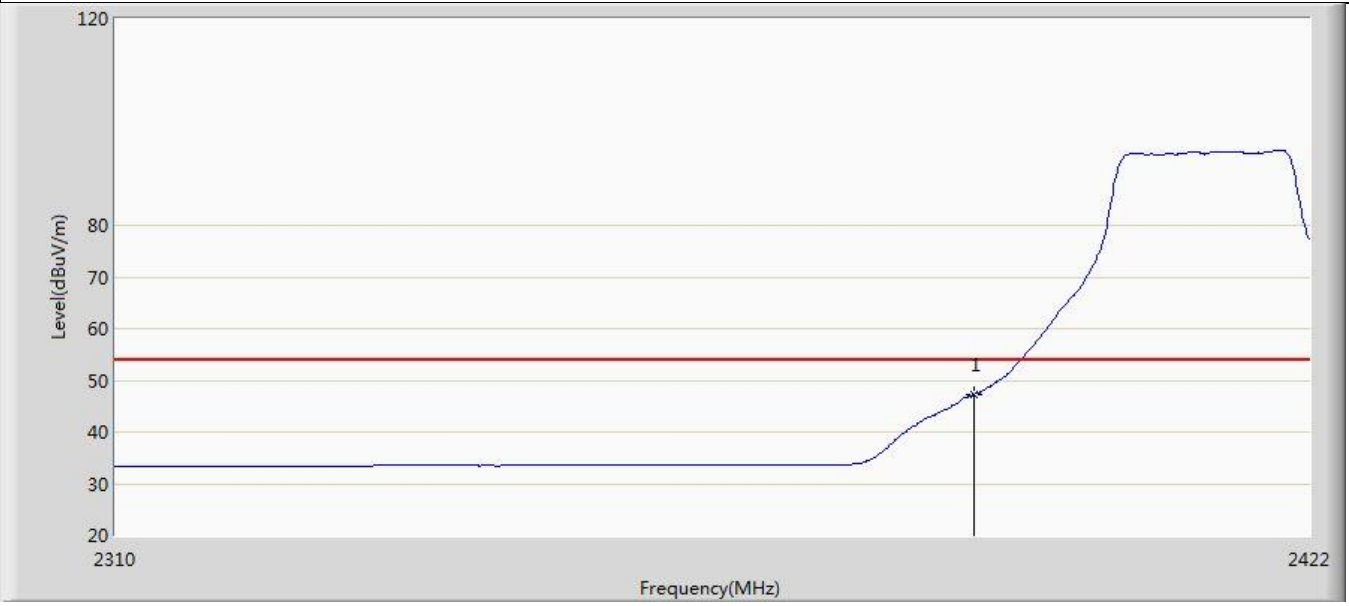
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	34.848	0.332	-19.152	54.000	34.516	AV

Profile: 2360694R	Page No.: 9
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2412MHz by 802.11g with Ant1	



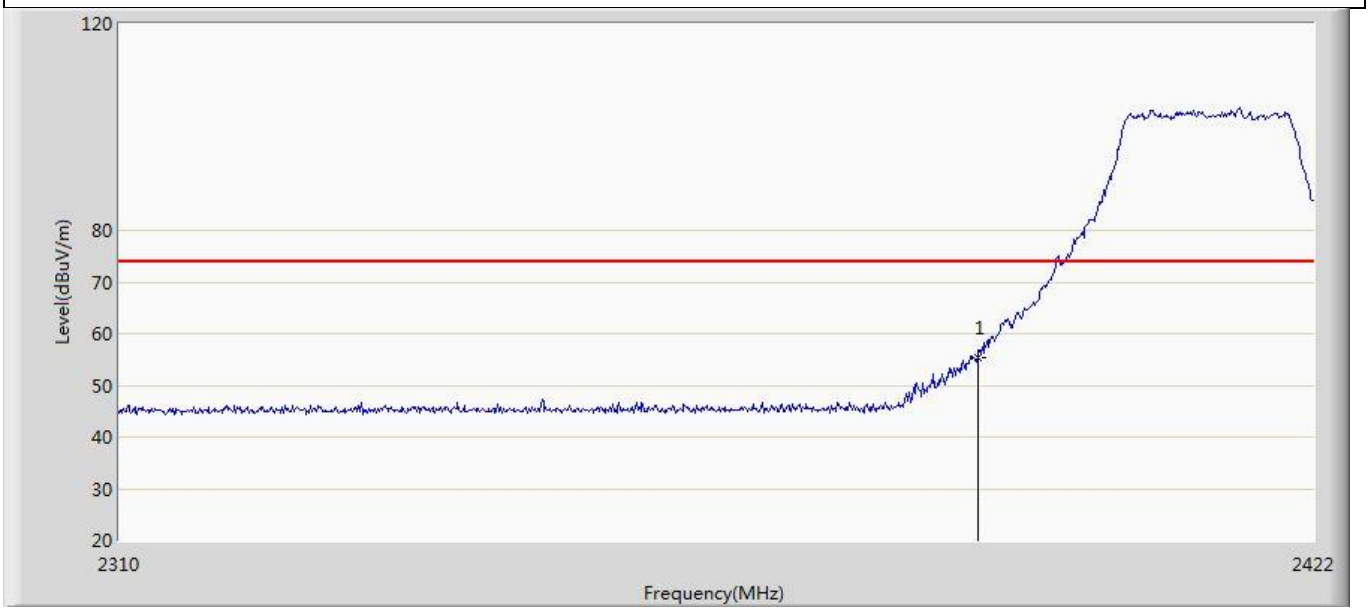
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	60.089	25.976	-13.911	74.000	34.113	PK

Profile: 2360694R	Page No.: 10
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2412MHz by 802.11g with Ant1	



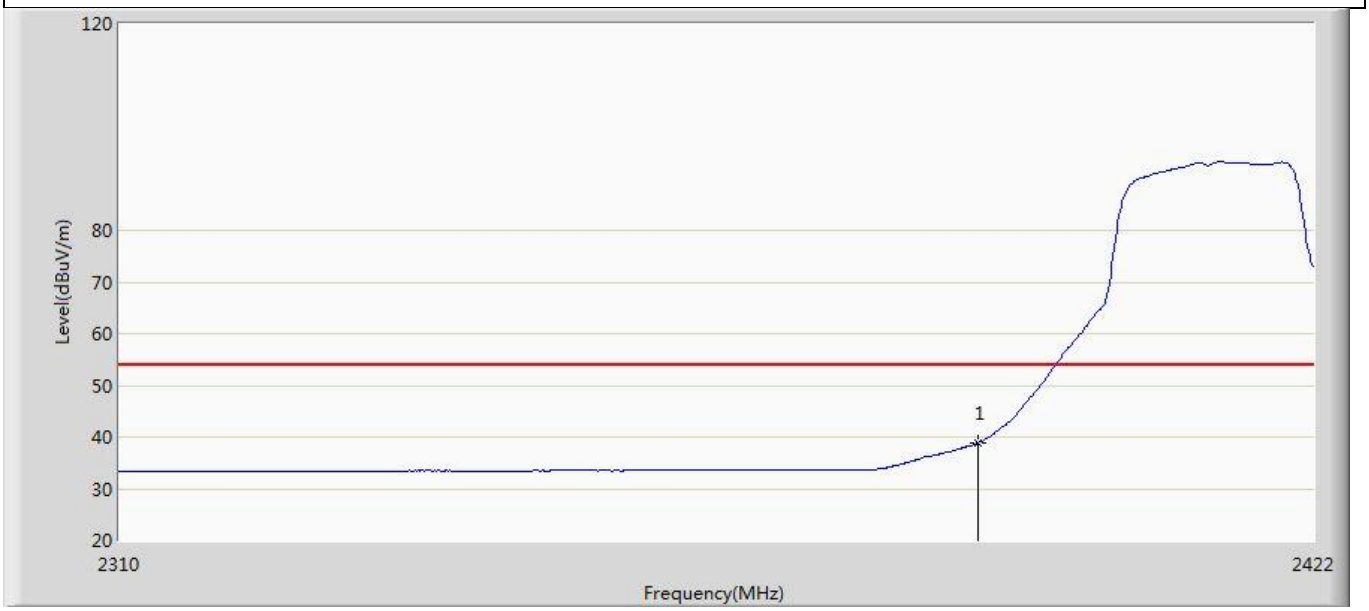
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.243	13.130	-6.757	54.000	34.113	AV

Profile: 2360694R	Page No.: 11
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2412MHz by 802.11g with Ant1	



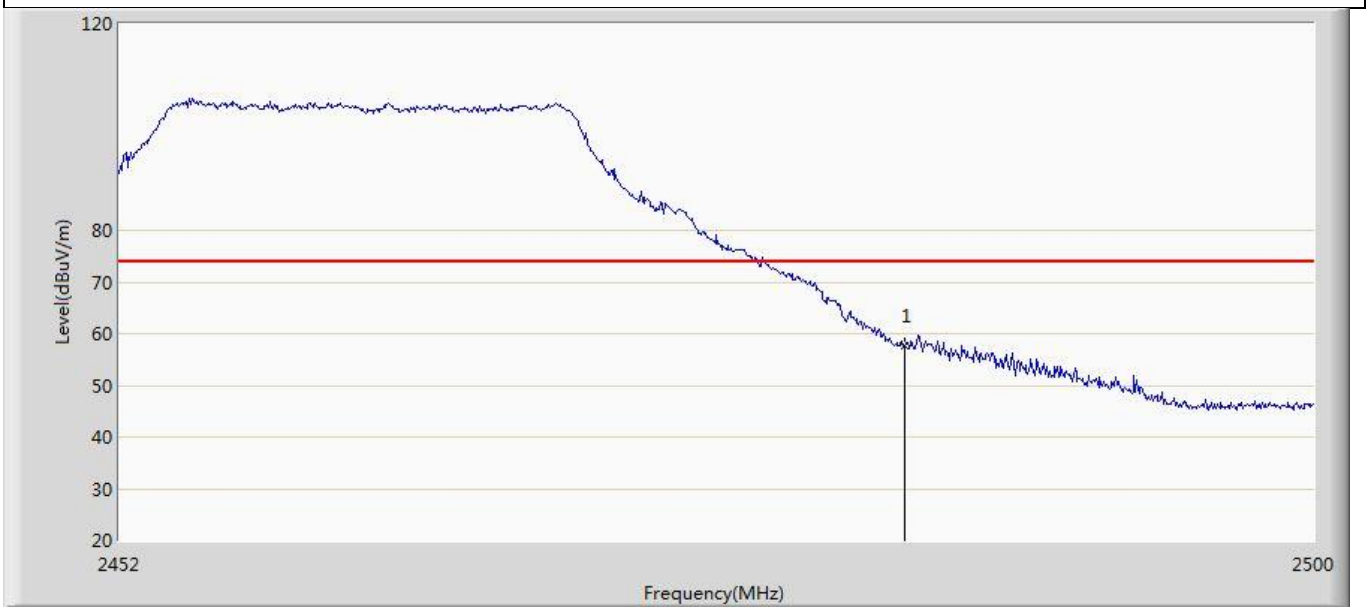
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	55.301	21.188	-18.699	74.000	34.113	PK

Profile: 2360694R	Page No.: 12
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2412MHz by 802.11g with Ant1	



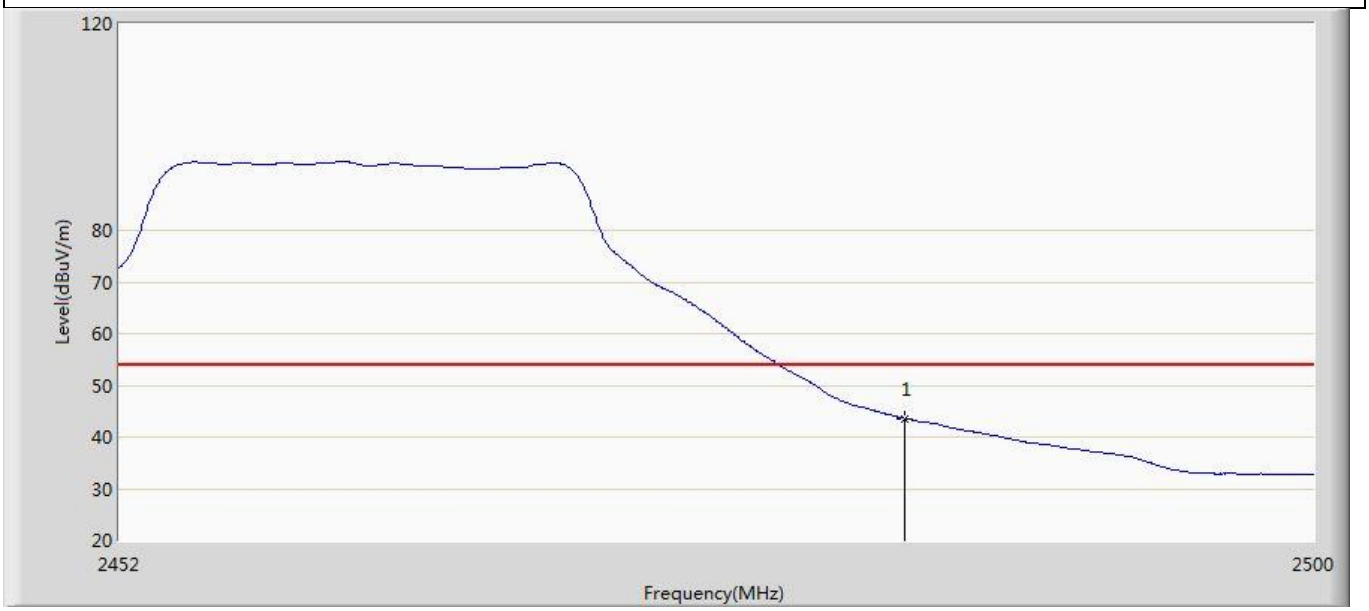
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	38.897	4.784	-15.103	54.000	34.113	AV

Profile: 2360694R	Page No.: 13
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2462MHz by 802.11g with Ant1	



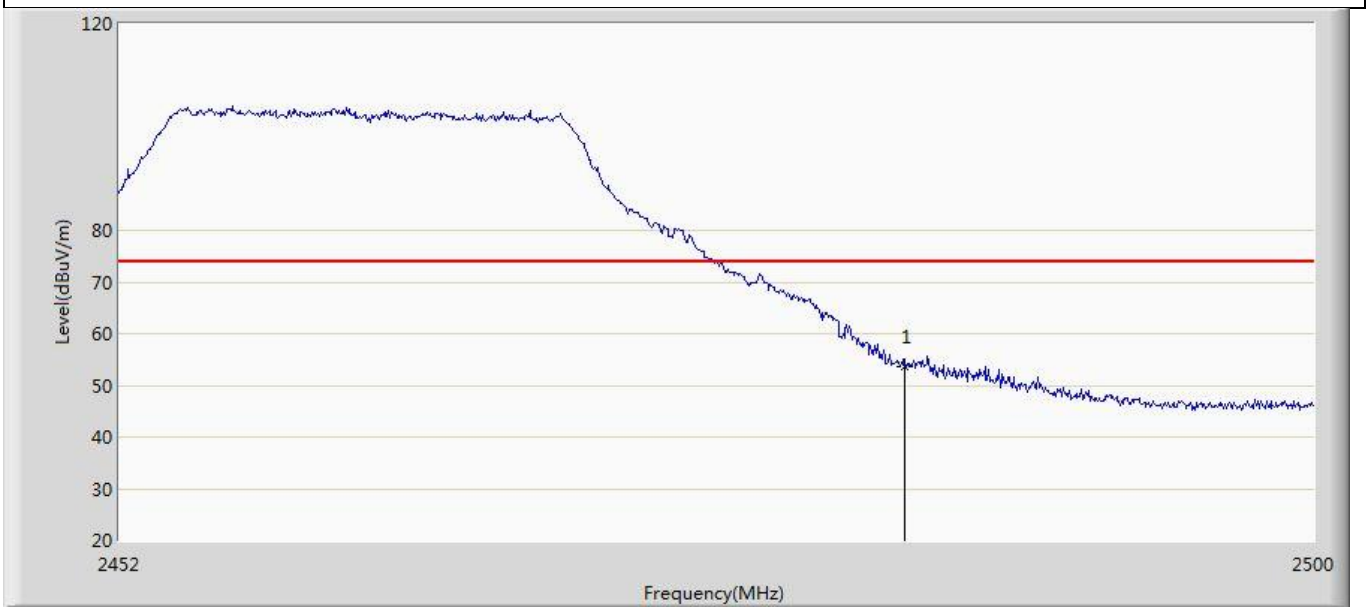
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.579	23.063	-16.421	74.000	34.516	PK

Profile: 2360694R	Page No.: 14
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2462MHz by 802.11g with Ant1	



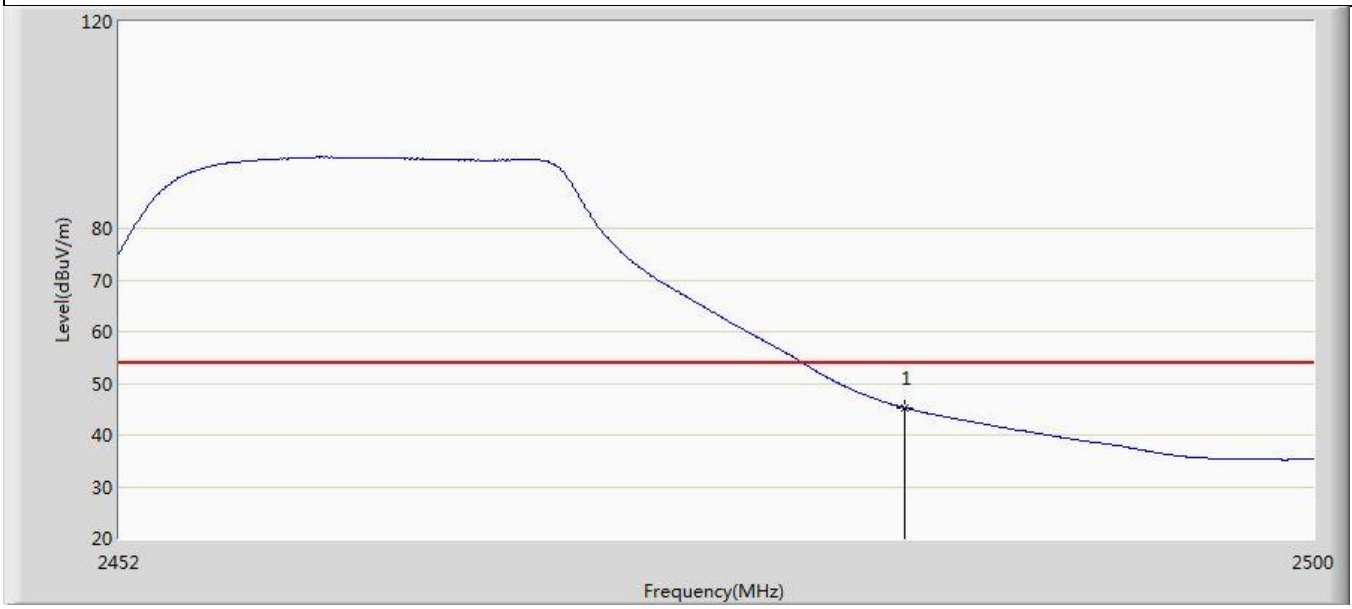
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	43.585	9.069	-10.415	54.000	34.516	AV

Profile: 2360694R	Page No.: 15
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2462MHz by 802.11g with Ant1	



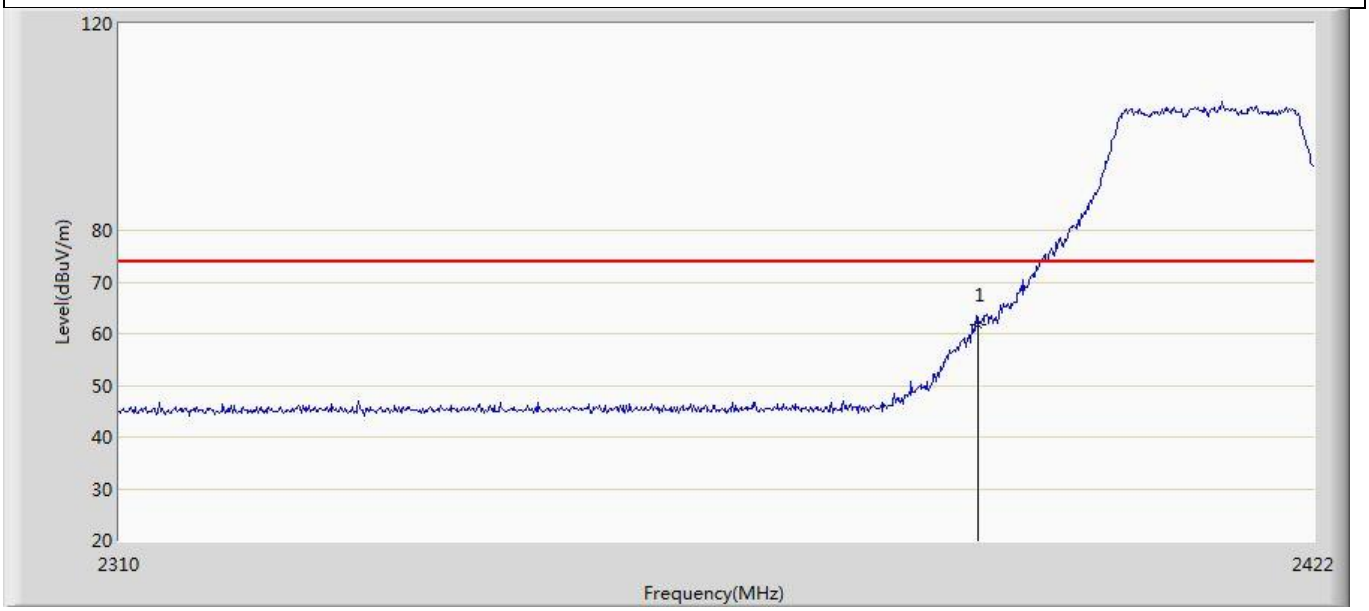
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.578	19.062	-20.422	74.000	34.516	PK

Profile: 2360694R	Page No.: 16
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 2：Transmit at 2462MHz by 802.11g with Ant1	



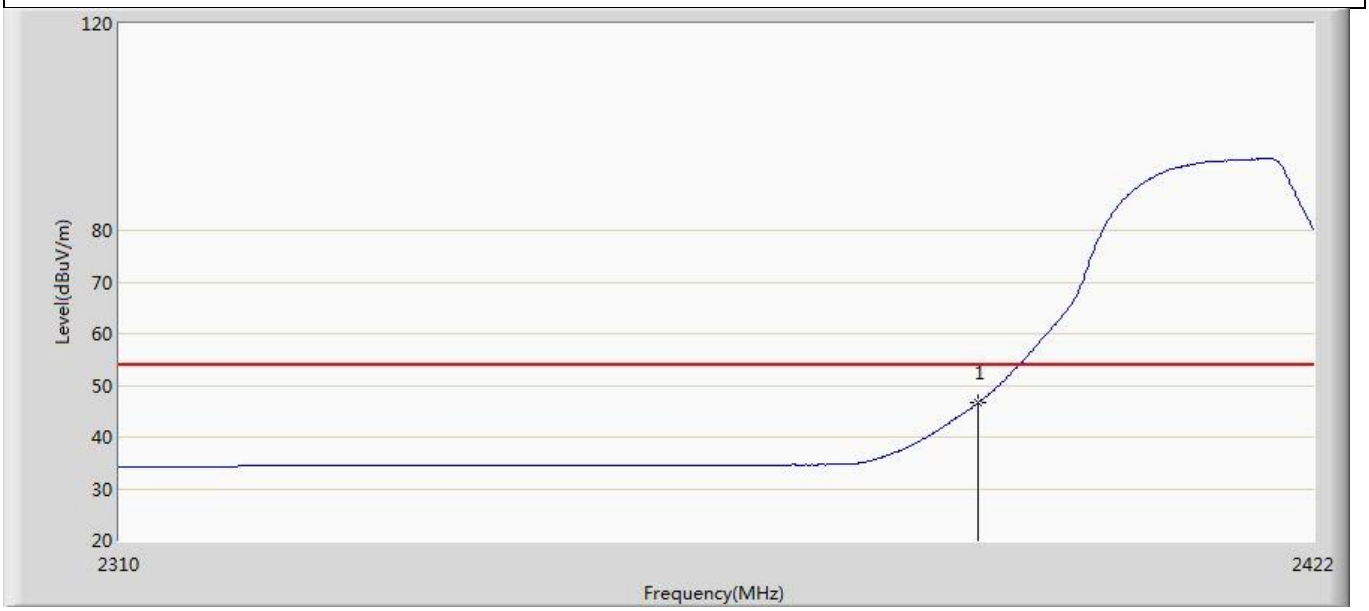
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.224	10.708	-8.776	54.000	34.516	AV

Profile: 2360694R	Page No.: 17
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) with Ant1	



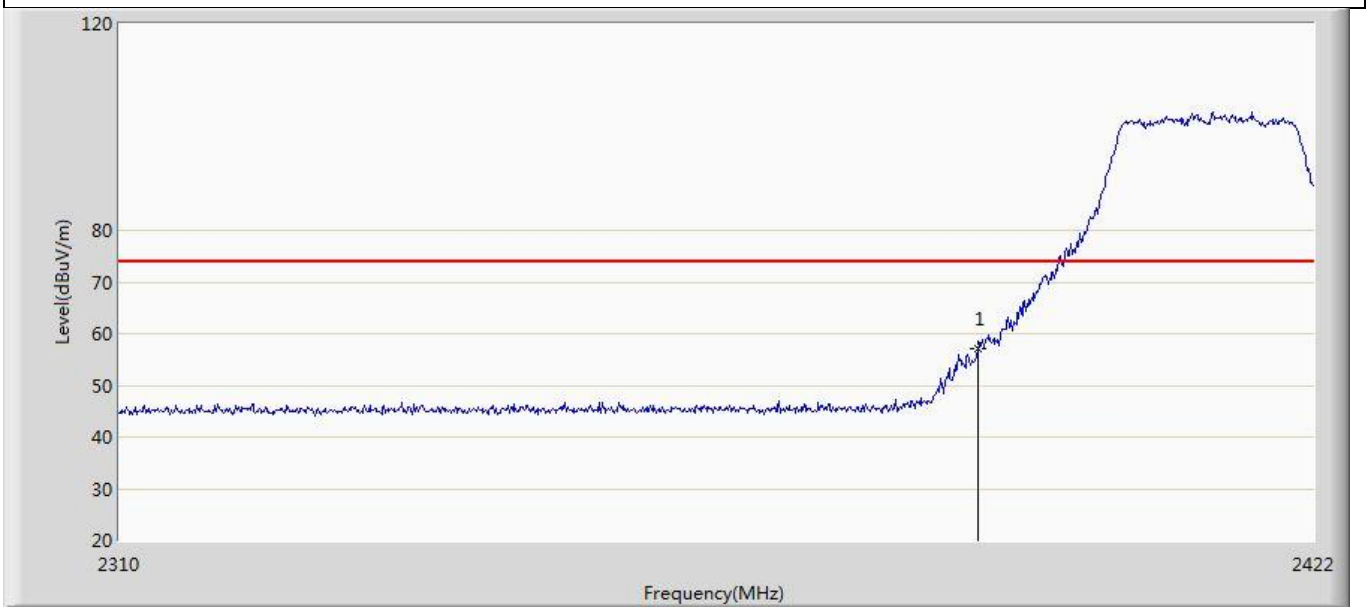
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	61.723	27.610	-12.277	74.000	34.113	PK

Profile: 2360694R	Page No.: 18
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) with Ant1	



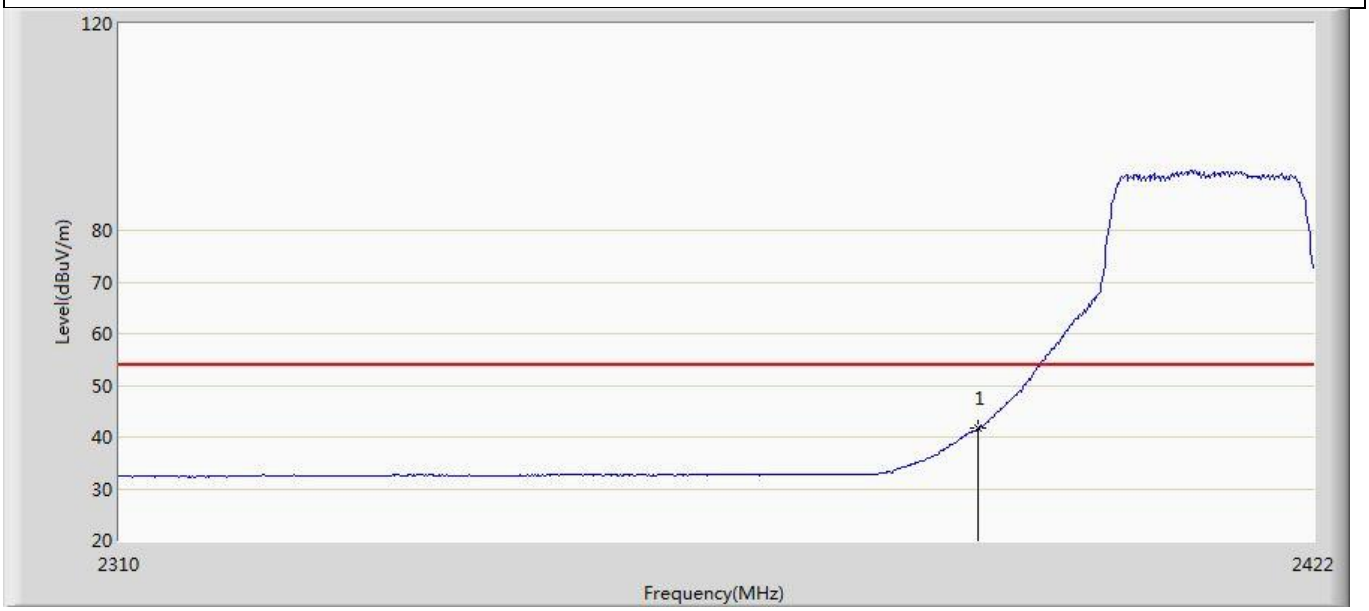
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.533	12.420	-7.467	54.000	34.113	AV

Profile: 2360694R	Page No.: 19
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) with Ant1	



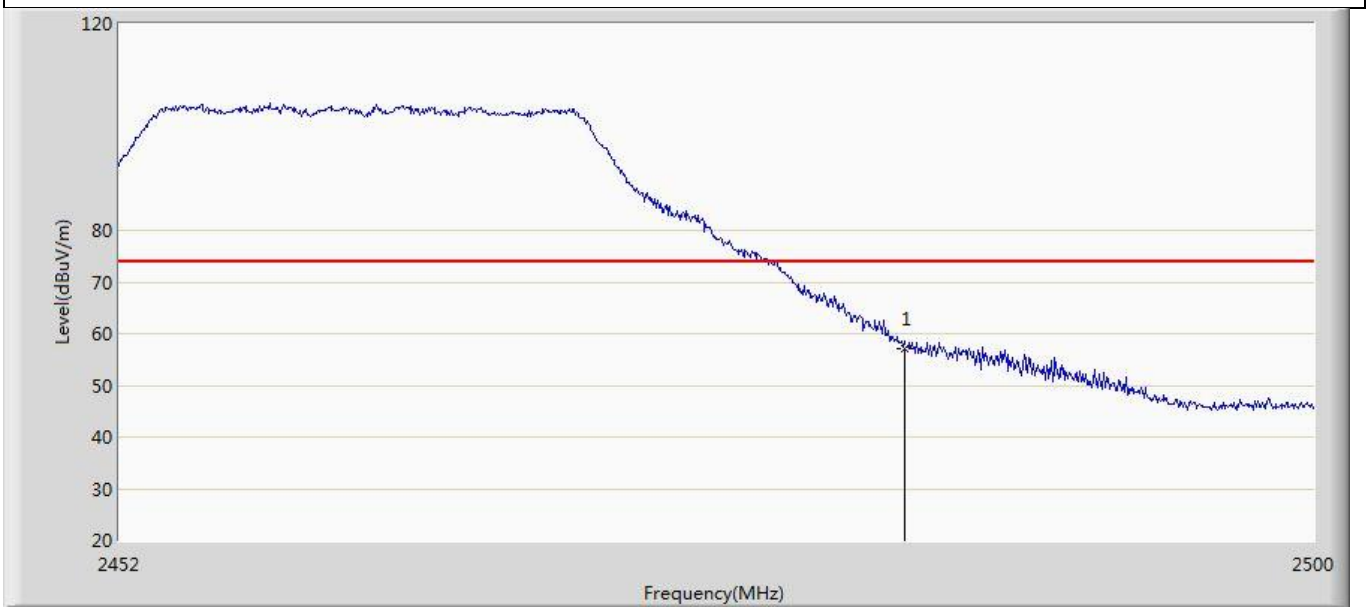
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	56.974	22.861	-17.026	74.000	34.113	PK

Profile: 2360694R	Page No.: 20
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) with Ant1	



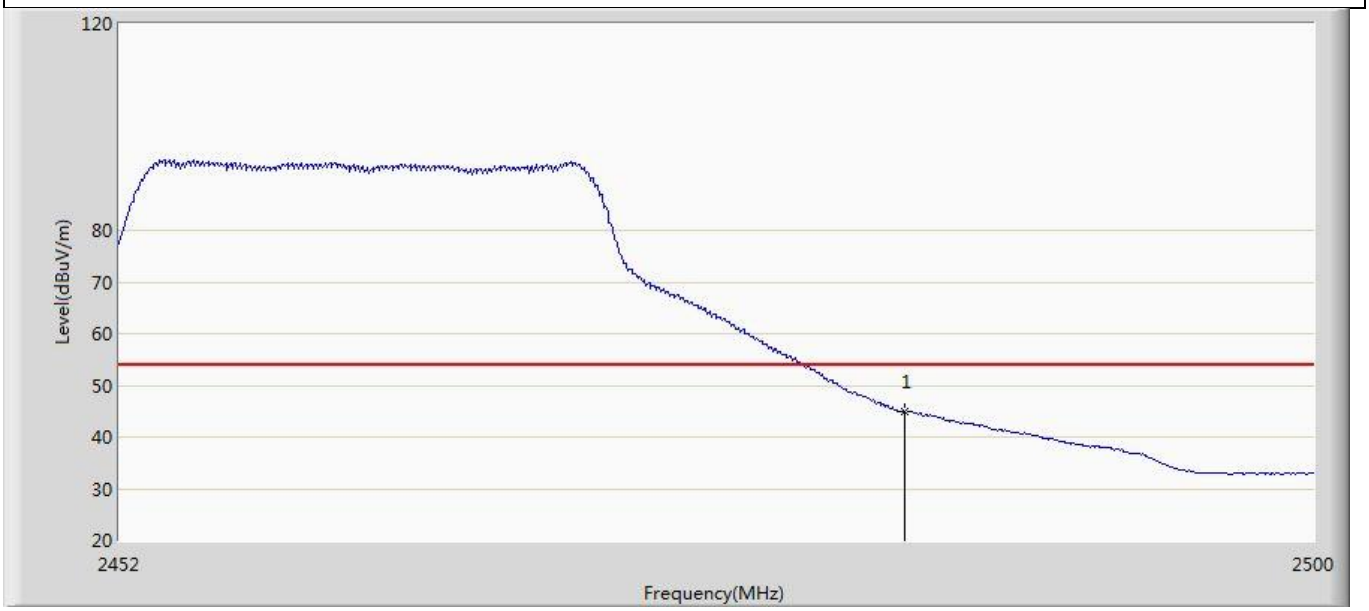
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	41.630	7.517	-12.370	54.000	34.113	AV

Profile: 2360694R	Page No.: 21
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) with Ant1	



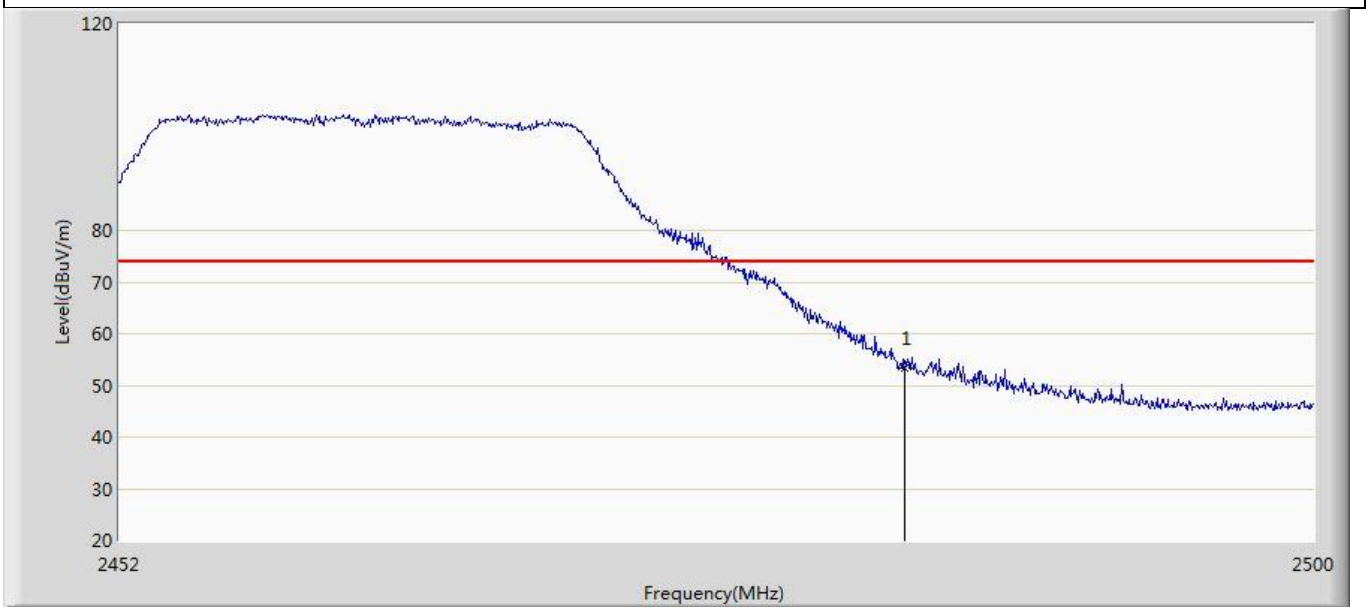
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.013	22.497	-16.987	74.000	34.516	PK

Profile: 2360694R	Page No.: 22
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) with Ant1	



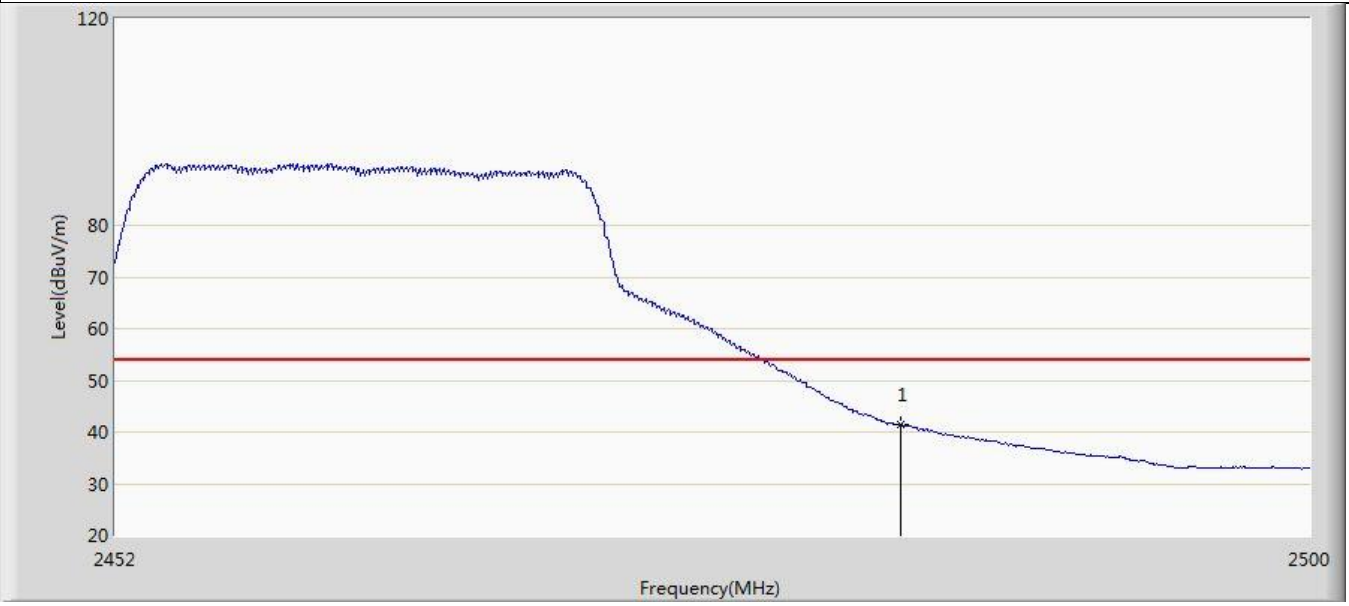
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.988	10.472	-9.012	54.000	34.516	AV

Profile: 2360694R	Page No.: 23
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) with Ant1	



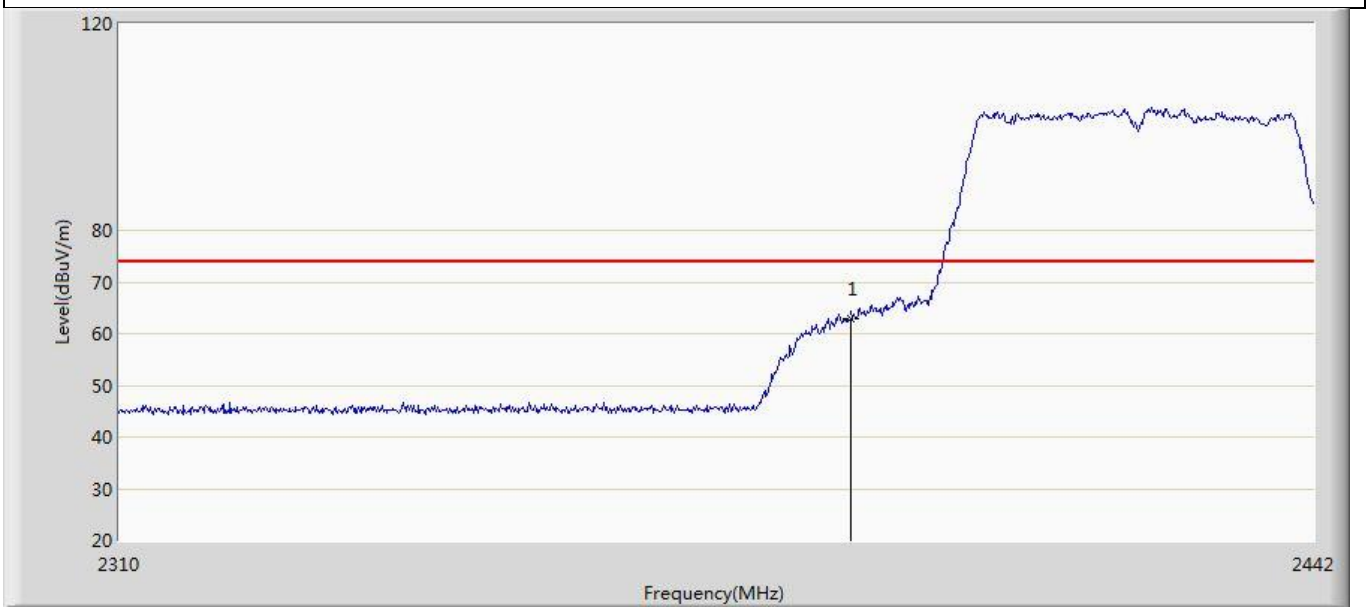
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.314	18.798	-20.686	74.000	34.516	PK

Profile: 2360694R	Page No.: 24
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) with Ant1	



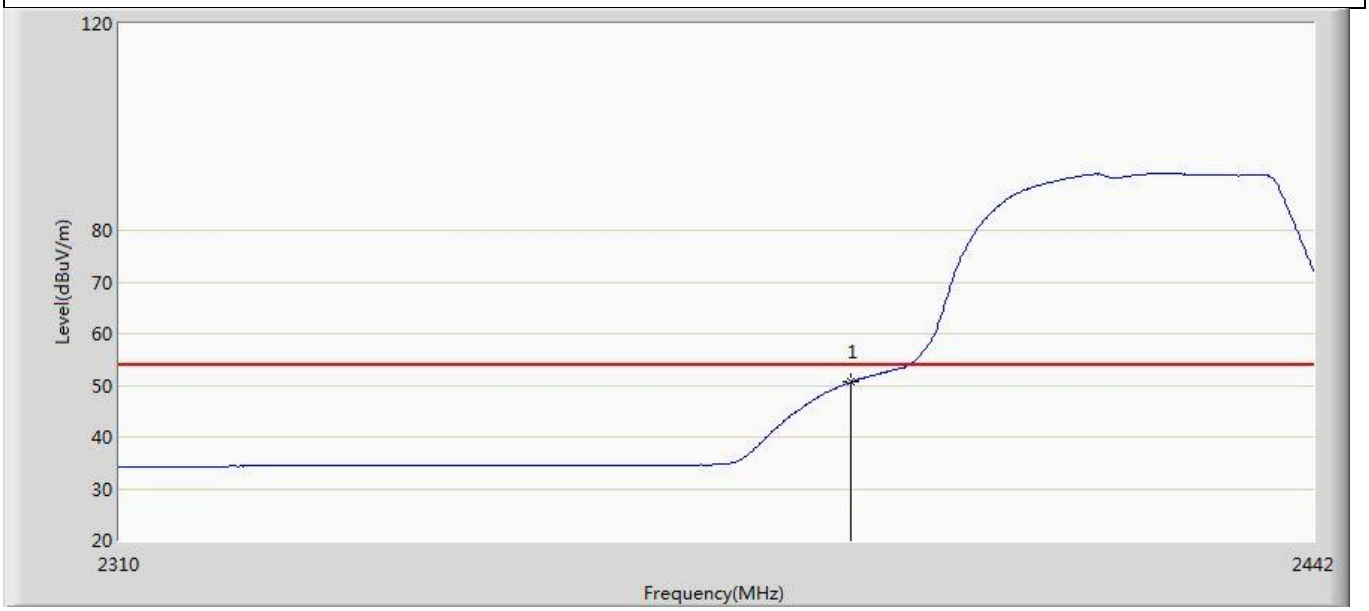
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	41.362	6.846	-12.638	54.000	34.516	AV

Profile: 2360694R	Page No.: 25
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) with Ant1	



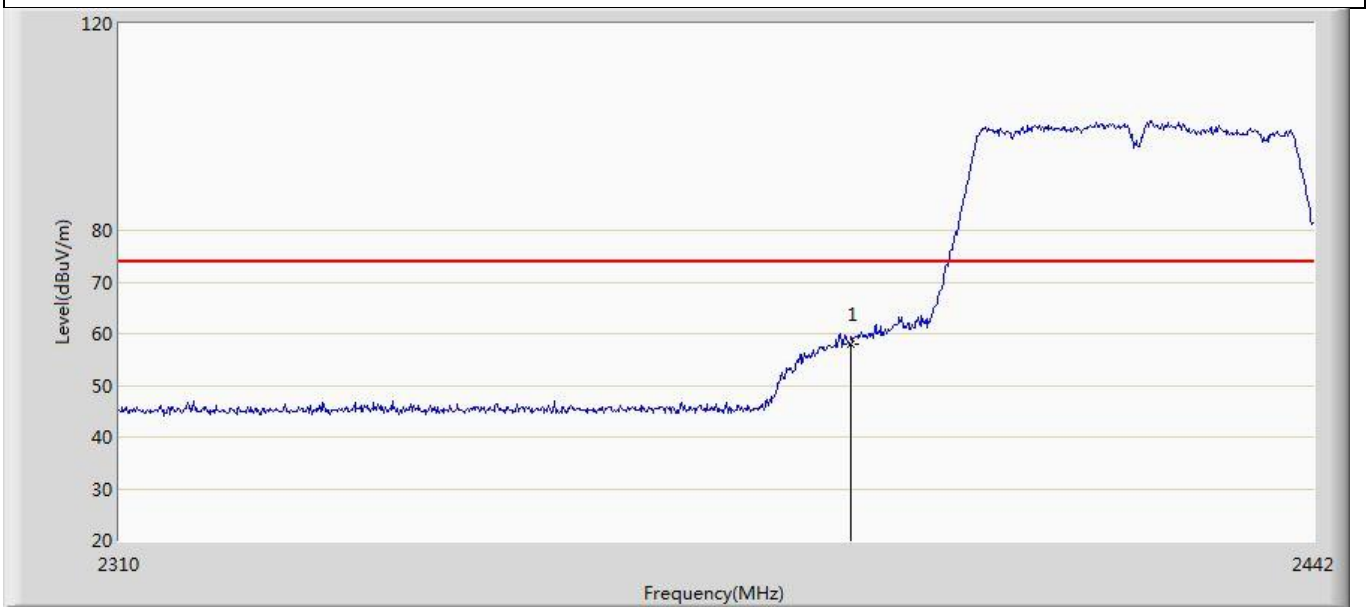
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	62.812	28.699	-11.188	74.000	34.113	PK

Profile: 2360694R	Page No.: 26
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) with Ant1	



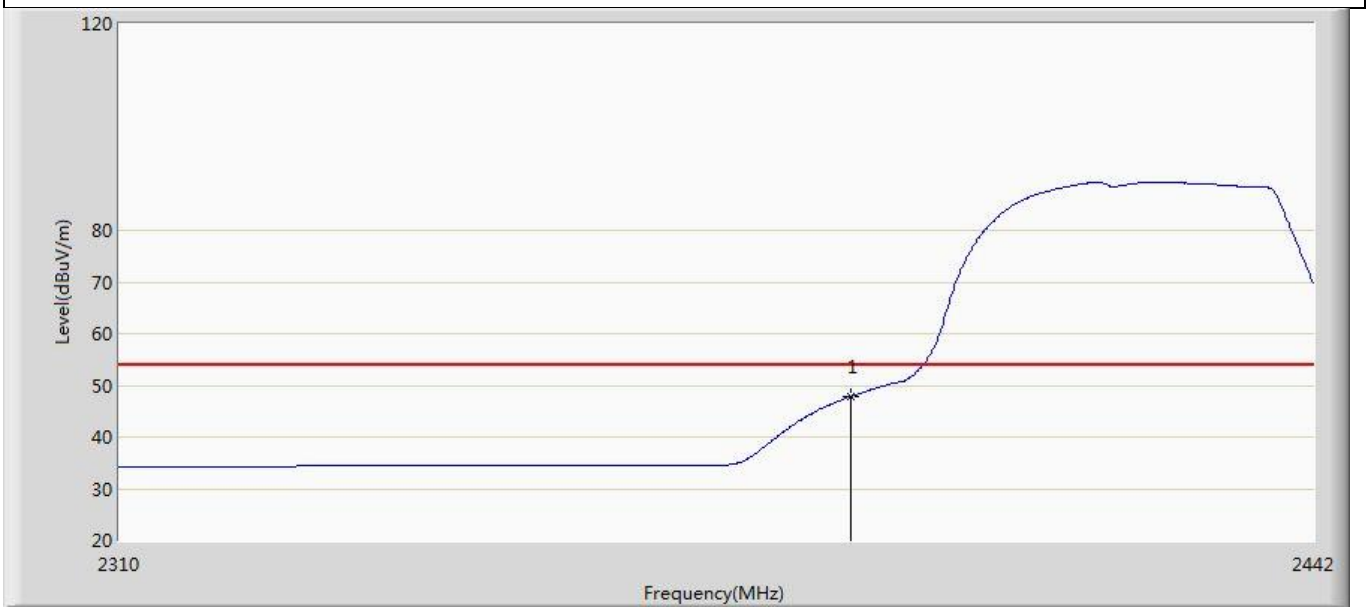
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.619	16.506	-3.381	54.000	34.113	AV

Profile: 2360694R	Page No.: 27
Engineer: RenZhang	
Site: AC5	Time: 2023/09/05 - 23:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) with Ant1	



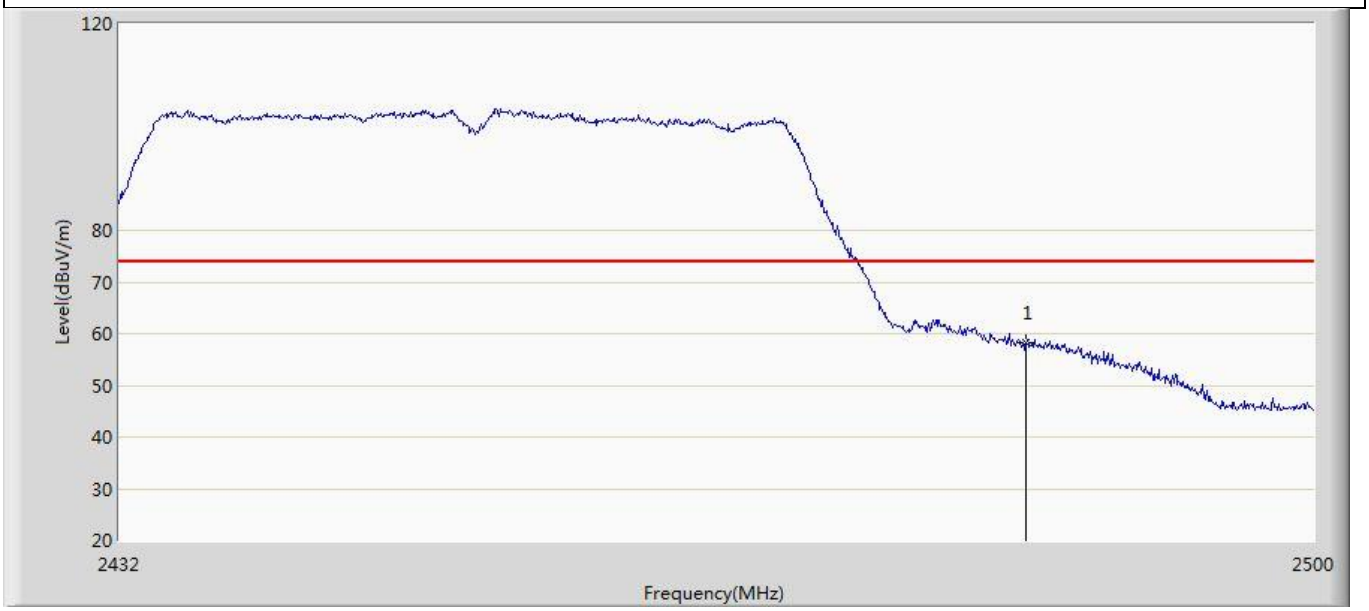
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	58.084	23.971	-15.916	74.000	34.113	PK

Profile: 2360694R	Page No.: 28
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06 - 00:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) with Ant1	



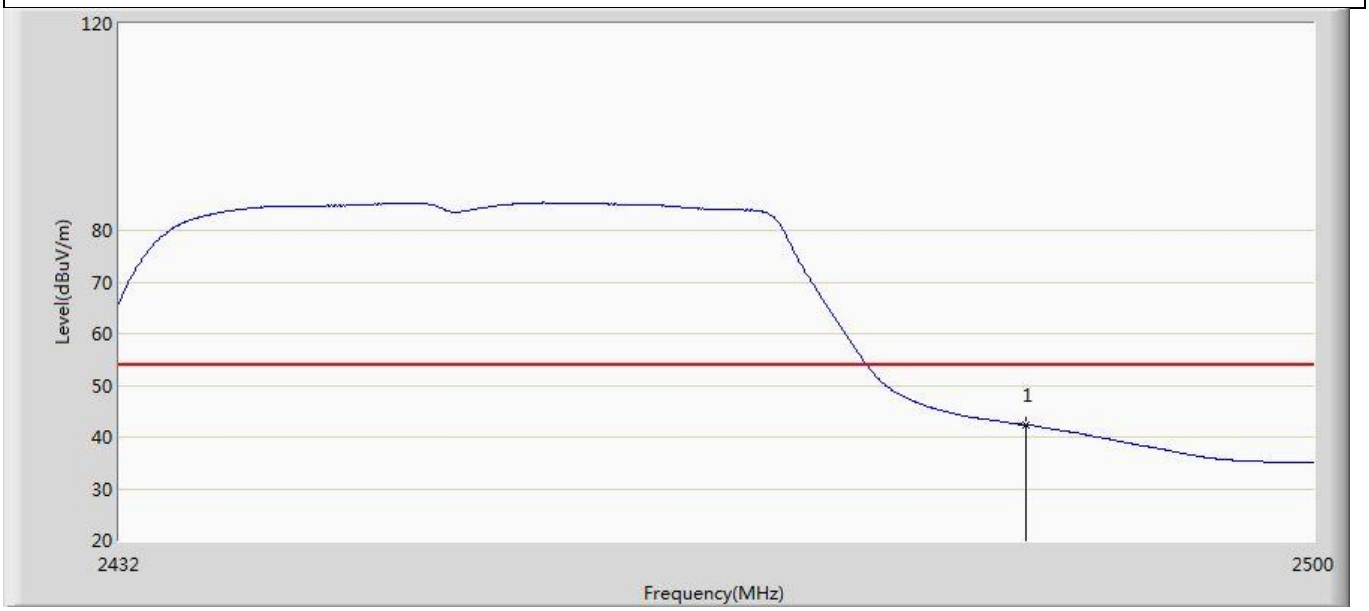
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.854	13.741	-6.146	54.000	34.113	AV

Profile: 2360694R	Page No.: 29
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06 - 00:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) with Ant1	



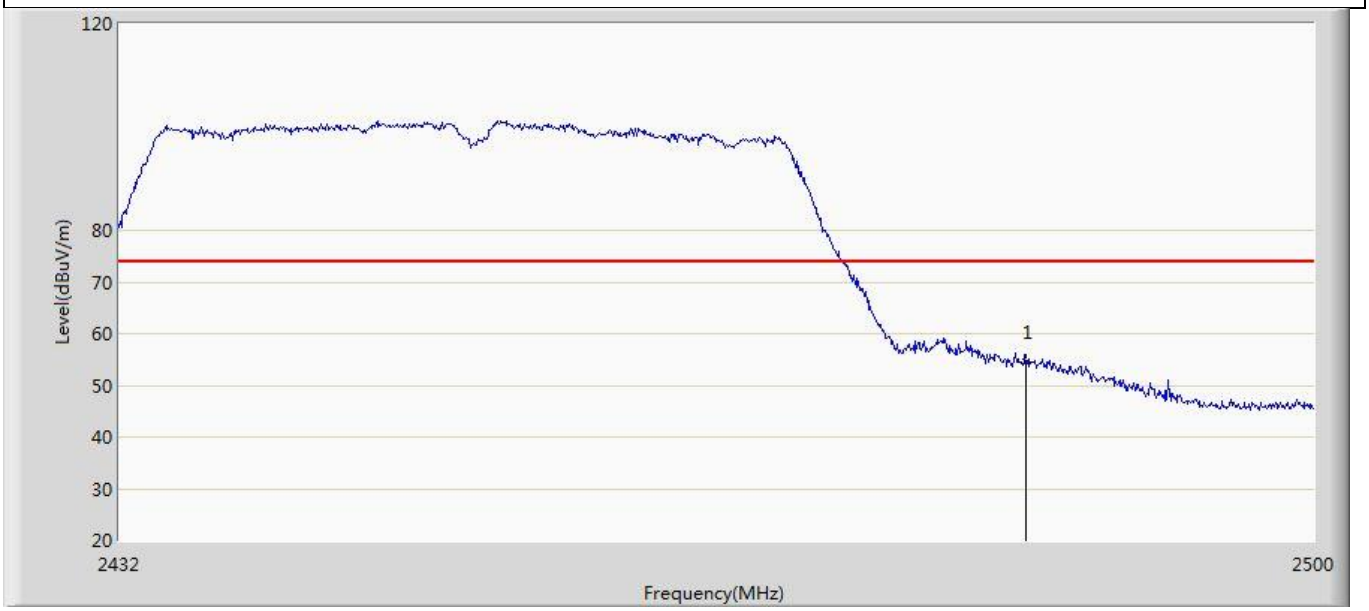
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	58.234	23.718	-15.766	74.000	34.516	PK

Profile: 2360694R	Page No.: 30
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06 - 00:03
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) with Ant1	



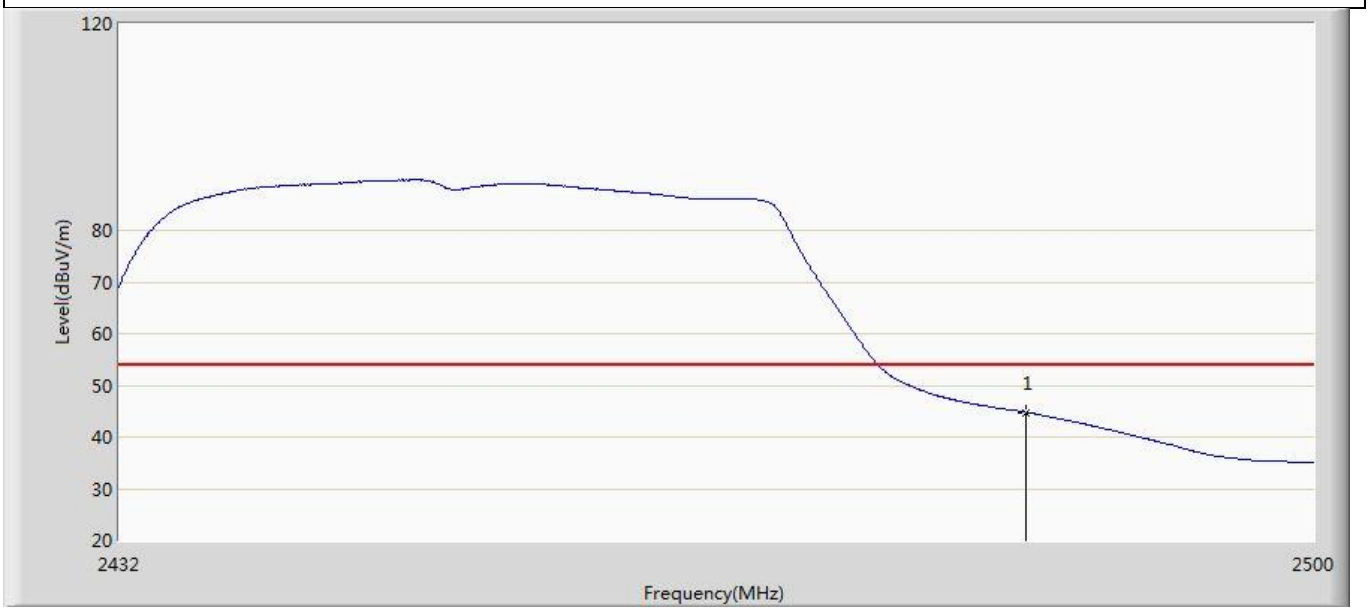
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	42.353	7.837	-11.647	54.000	34.516	AV

Profile: 2360694R	Page No.: 31
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06 - 00:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) with Ant1	



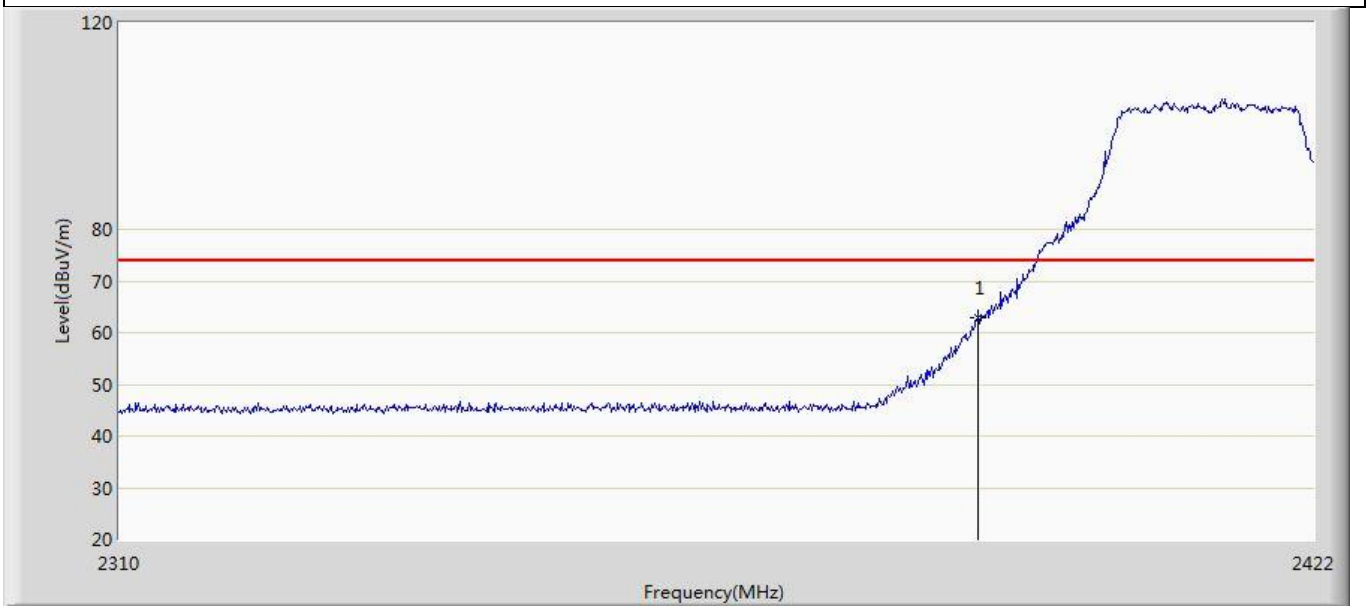
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	54.368	19.852	-19.632	74.000	34.516	PK

Profile: 2360694R	Page No.: 32
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06 - 00:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) with Ant1	



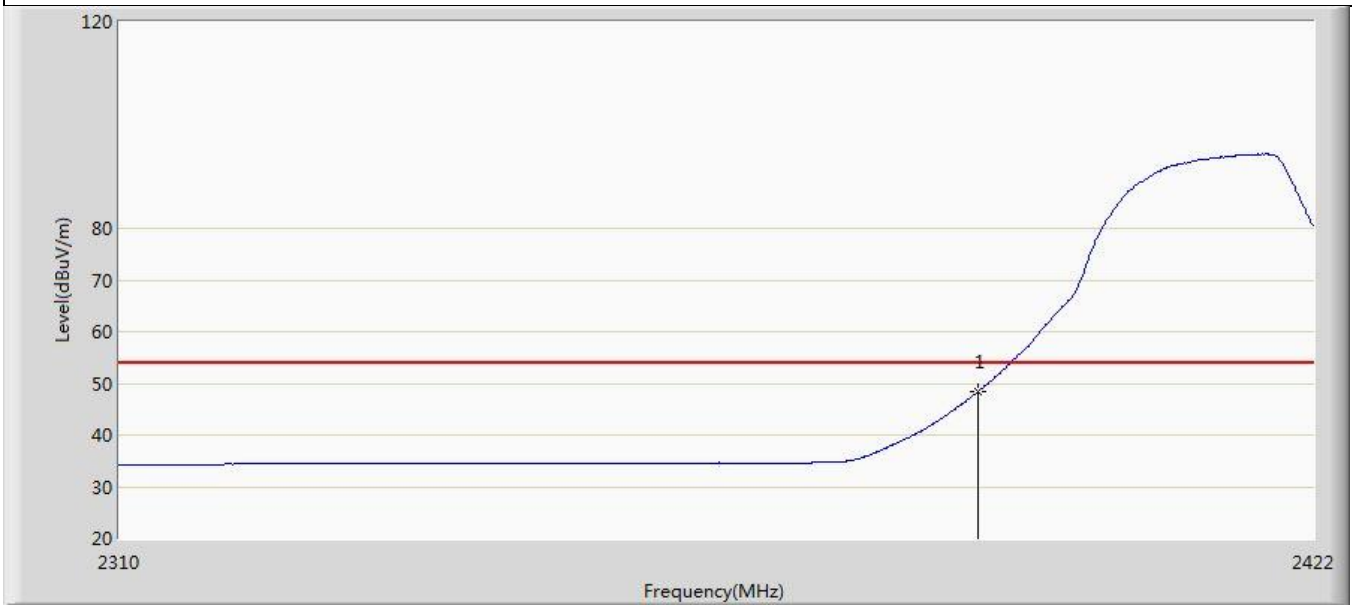
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.764	10.248	-9.236	54.000	34.516	AV

Profile: 2360694R	Page No.: 1
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) Ant1+2	



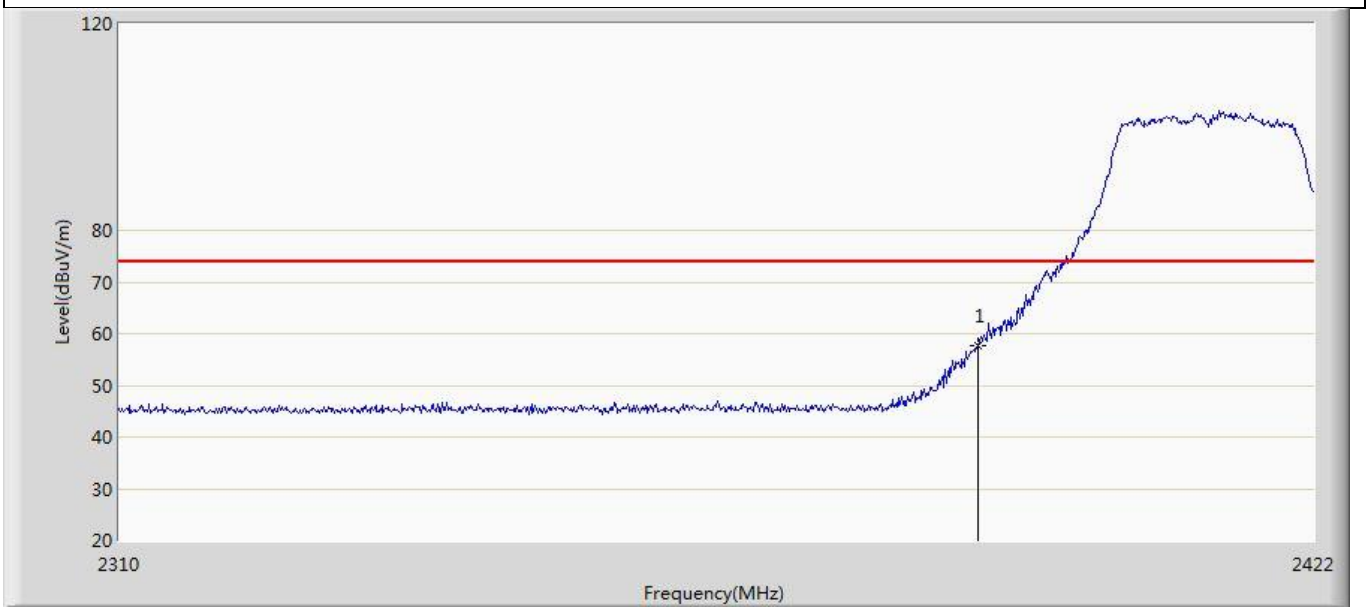
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	62.755	28.642	-11.245	74.000	34.113	PK

Profile: 2360694R	Page No.: 2
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) Ant1+2	



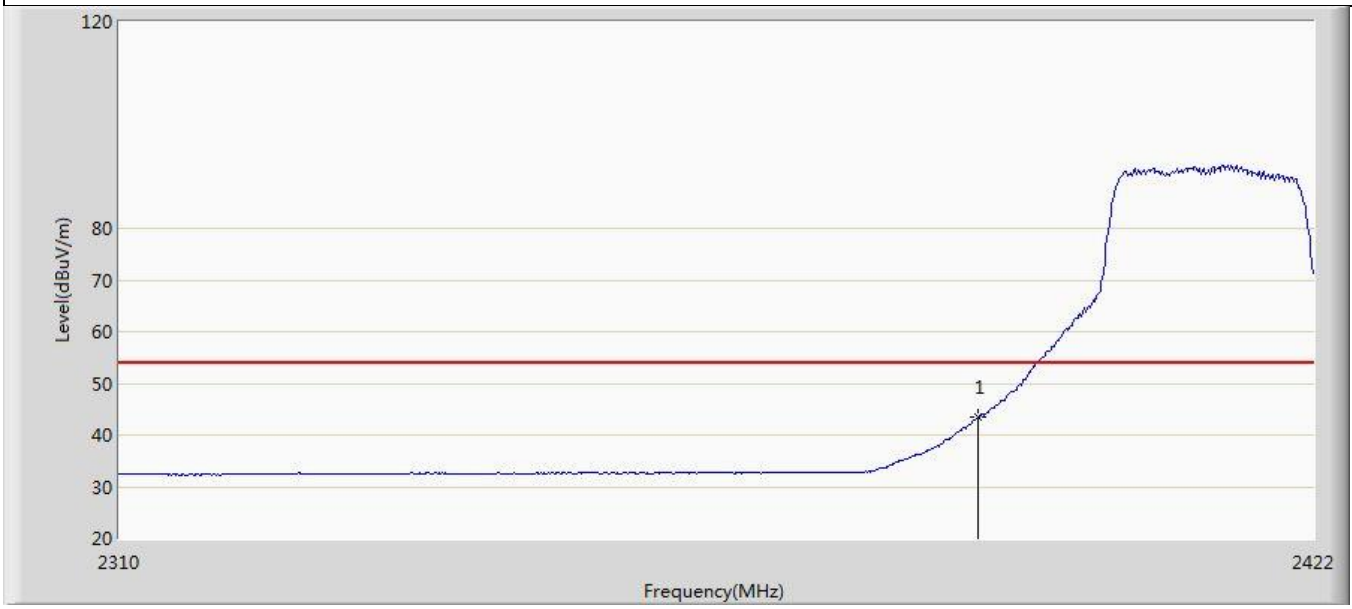
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	48.356	14.243	-5.644	54.000	34.113	AV

Profile: 2360694R	Page No.: 3
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) Ant1+2	



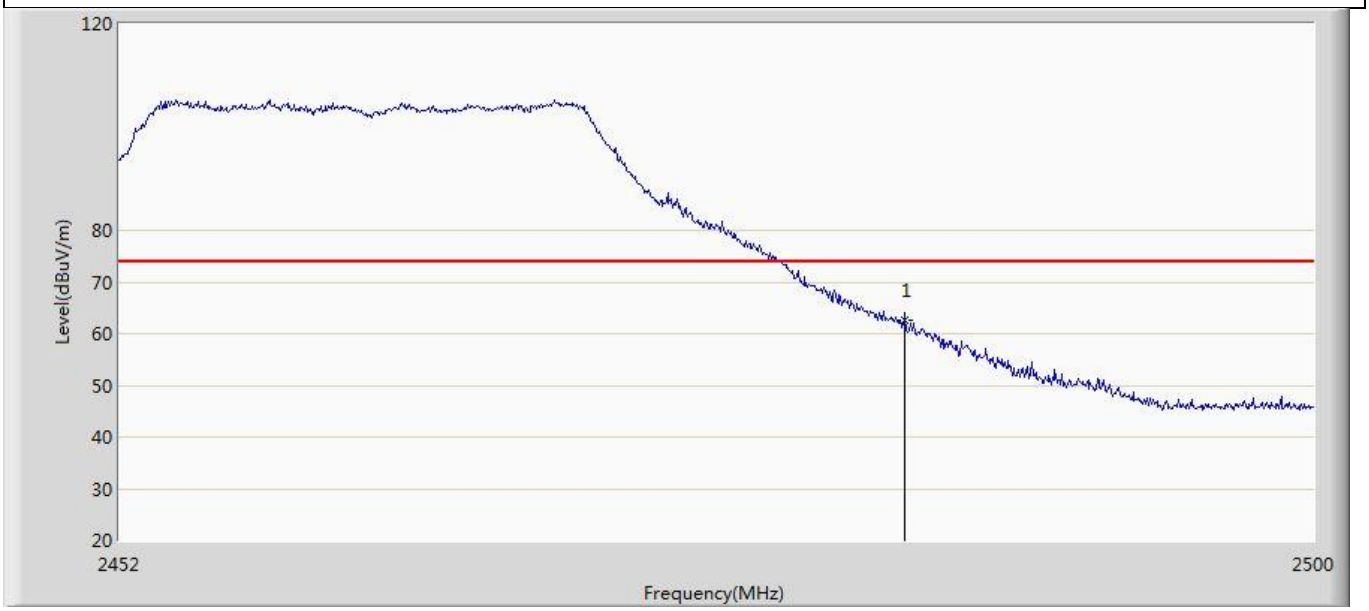
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	57.709	23.596	-16.291	74.000	34.113	PK

Profile: 2360694R	Page No.: 4
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2412MHz by 802.11n(20MHz) Ant1+2	



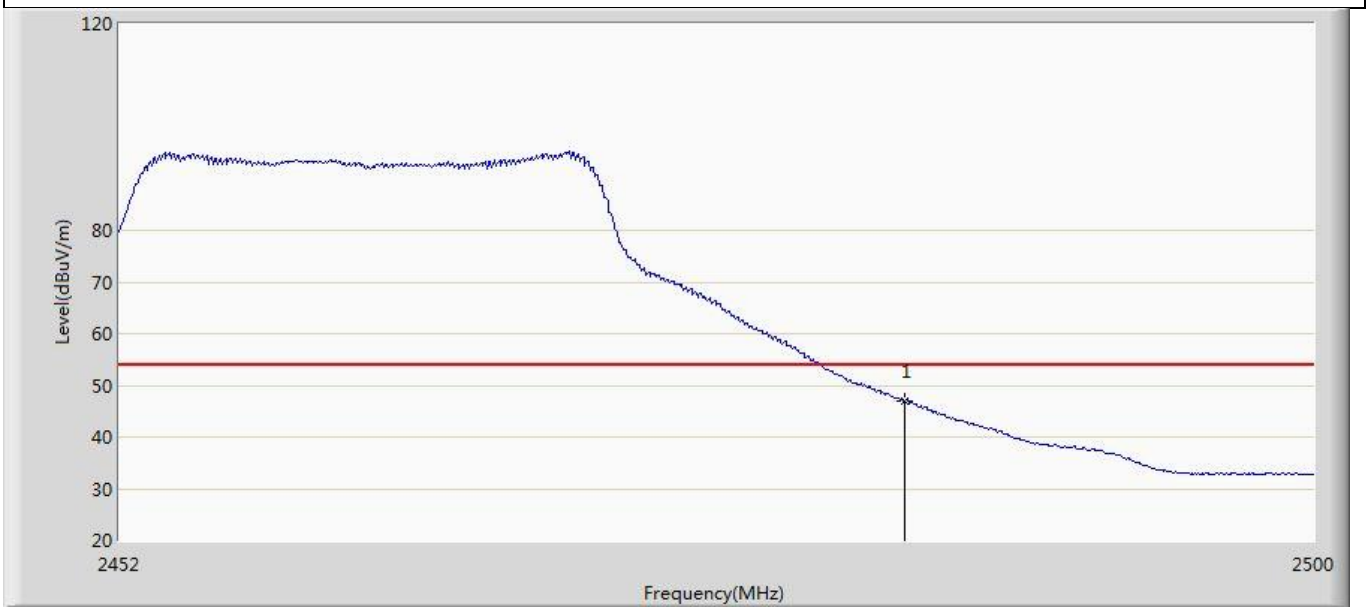
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	43.342	9.229	-10.658	54.000	34.113	AV

Profile: 2360694R	Page No.: 5
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) Ant1+2	



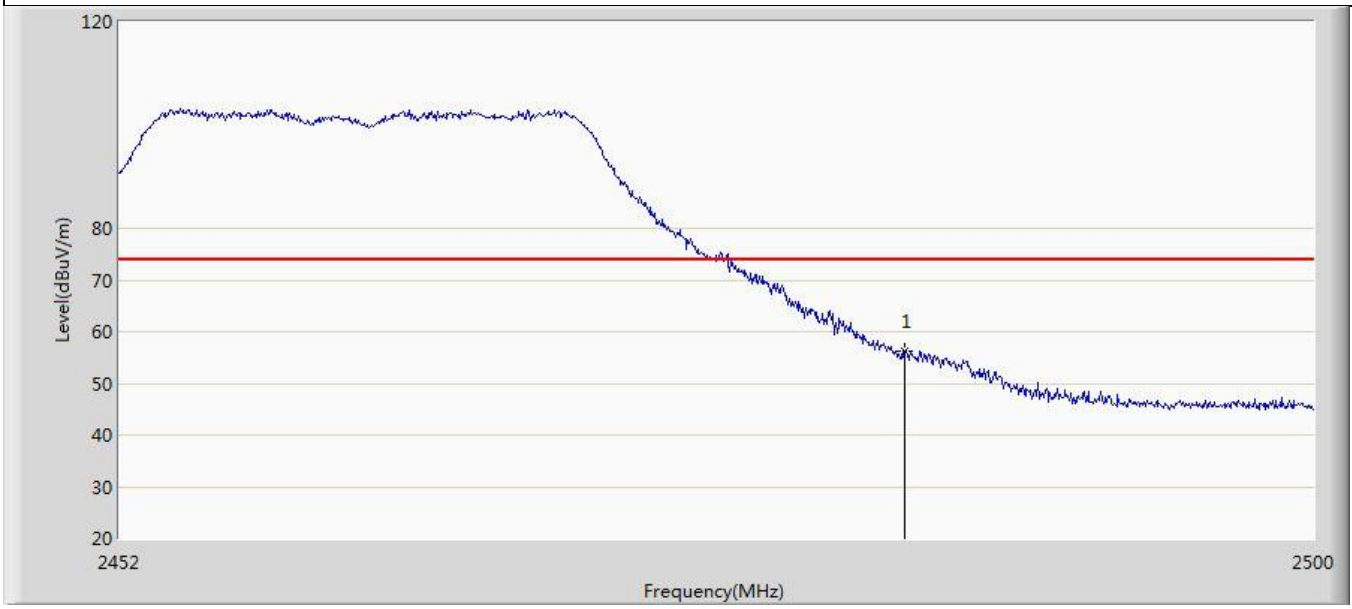
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	62.561	28.045	-11.439	74.000	34.516	PK

Profile: 2360694R	Page No.: 6
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) Ant1+2	



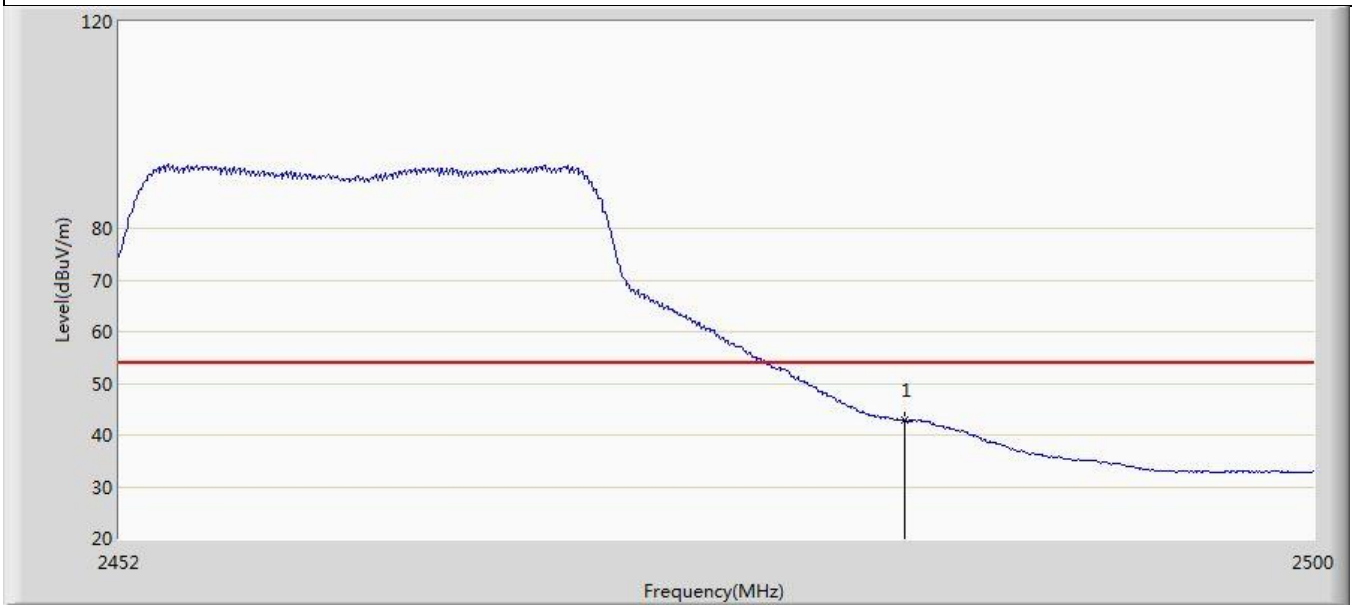
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	47.042	12.526	-6.958	54.000	34.516	AV

Profile: 2360694R	Page No.: 7
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) Ant1+2	



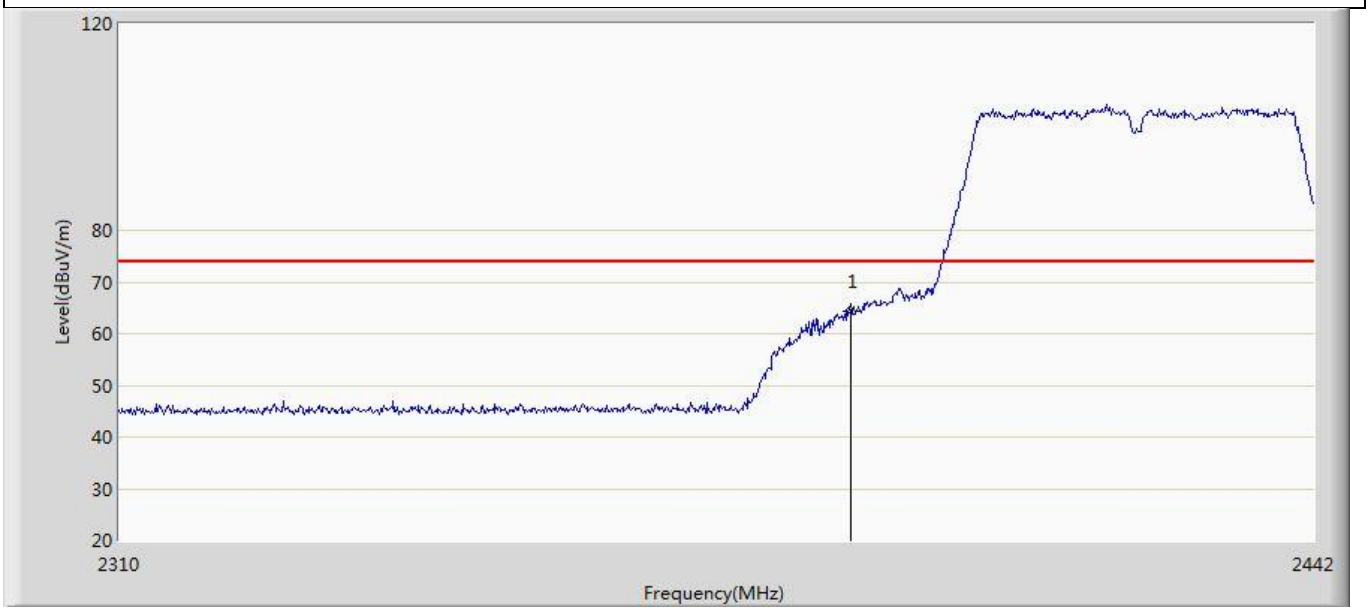
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	56.267	21.751	-17.733	74.000	34.516	PK

Profile: 2360694R	Page No.: 8
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 3：Transmit at 2462MHz by 802.11n(20MHz) Ant1+2	



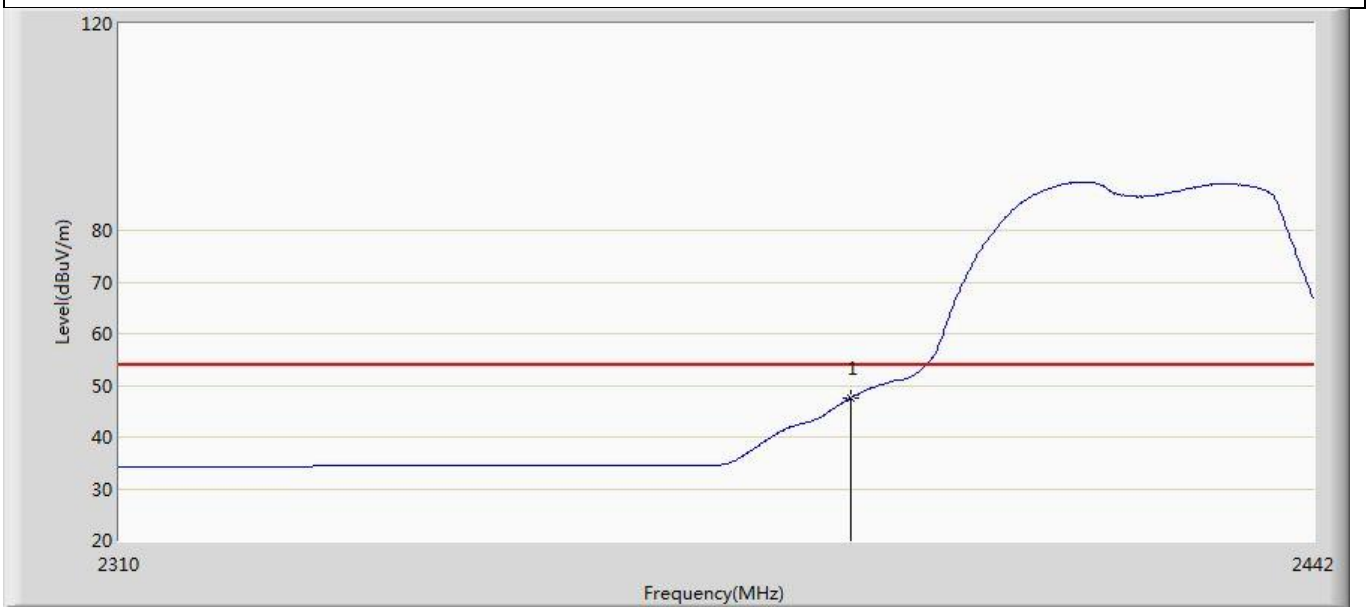
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	43.011	8.495	-10.989	54.000	34.516	AV

Profile: 2360694R	Page No.: 9
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) Ant1+2	



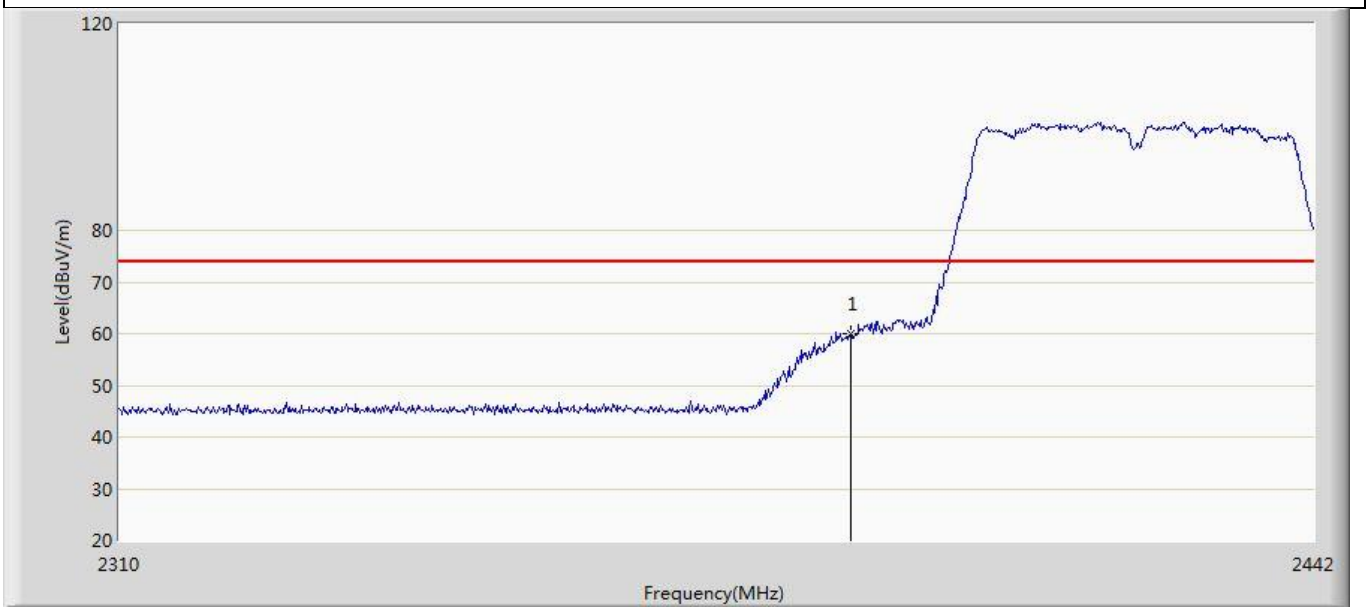
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	64.380	30.267	-9.620	74.000	34.113	PK

Profile: 2360694R	Page No.: 10
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) Ant1+2	



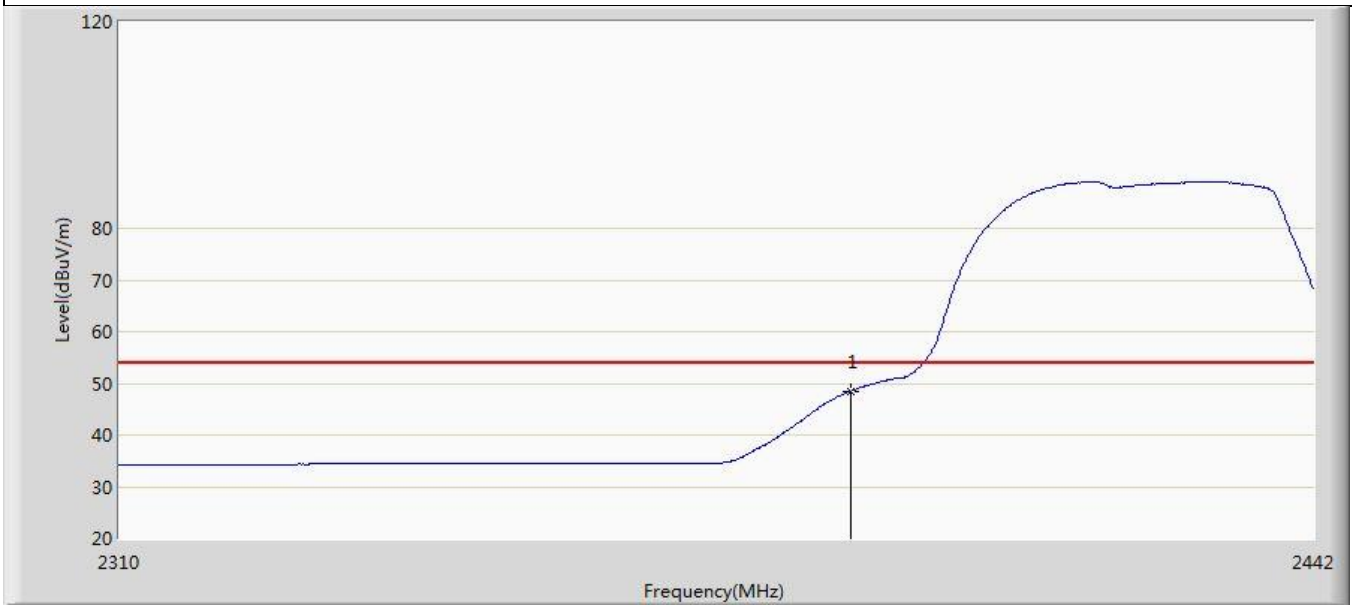
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.544	13.431	-6.456	54.000	34.113	AV

Profile: 2360694R	Page No.: 11
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) Ant1+2	



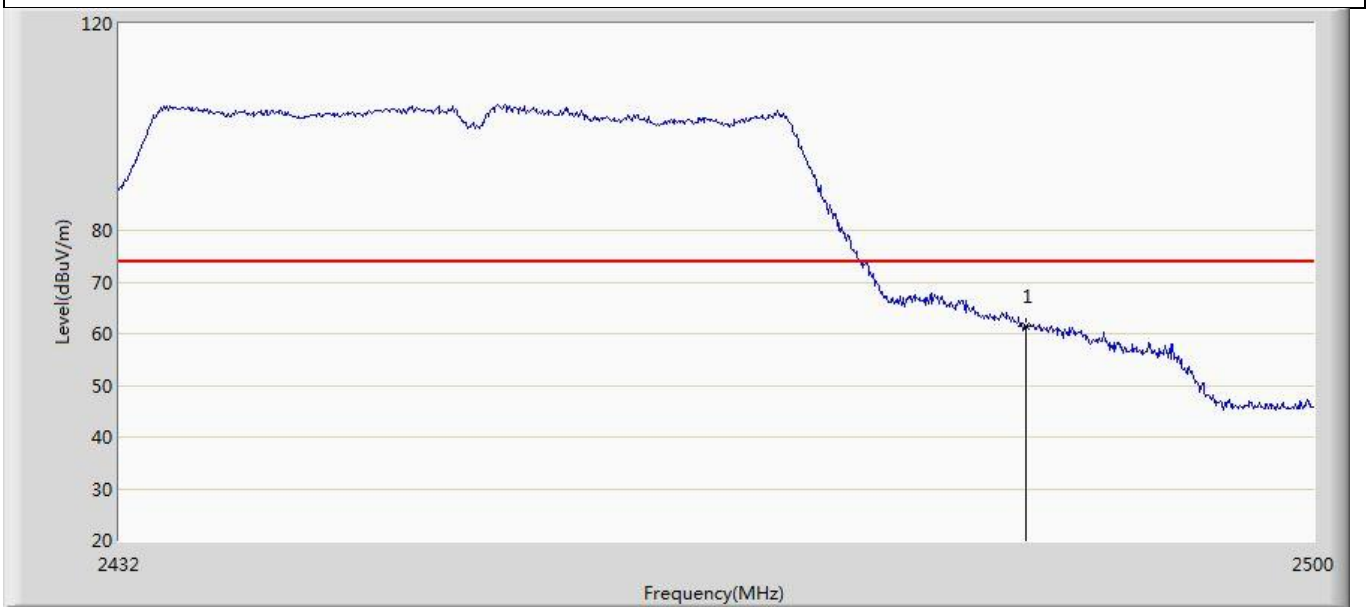
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	59.952	25.839	-14.048	74.000	34.113	PK

Profile: 2360694R	Page No.: 12
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2422MHz by 802.11n(40MHz) Ant1+2	



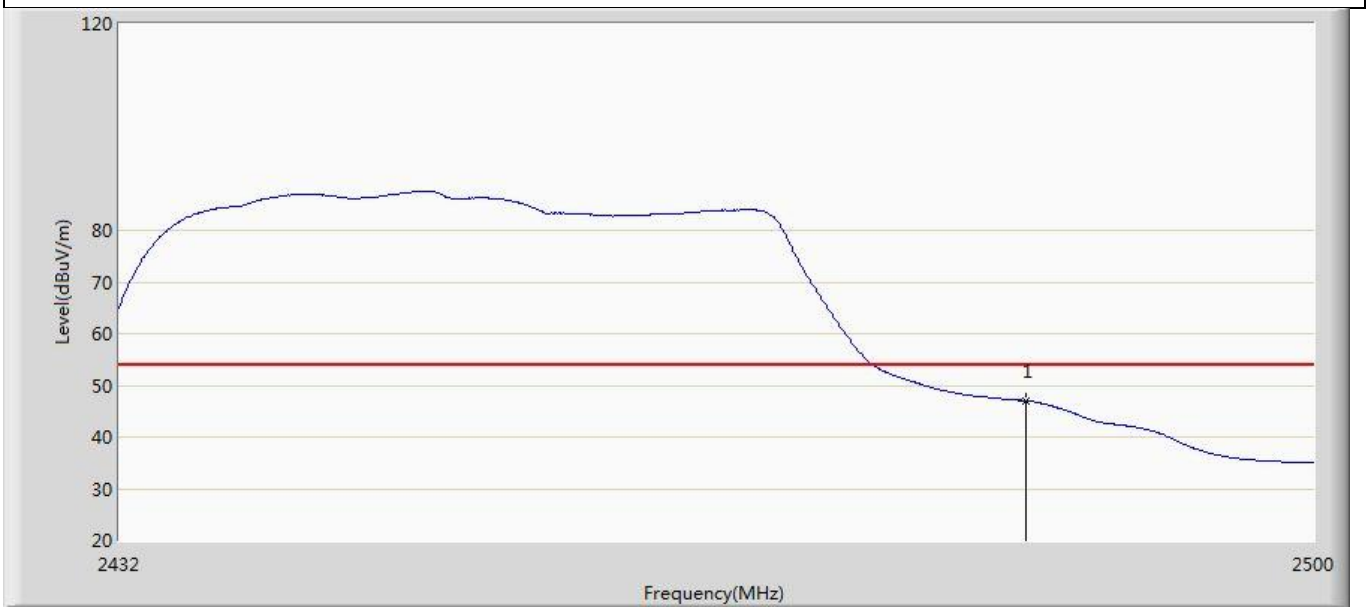
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	48.504	14.391	-5.496	54.000	34.113	AV

Profile: 2360694R	Page No.: 13
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) Ant1+2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	61.472	26.956	-12.528	74.000	34.516	PK

Profile: 2360694R	Page No.: 14
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) Ant1+2	

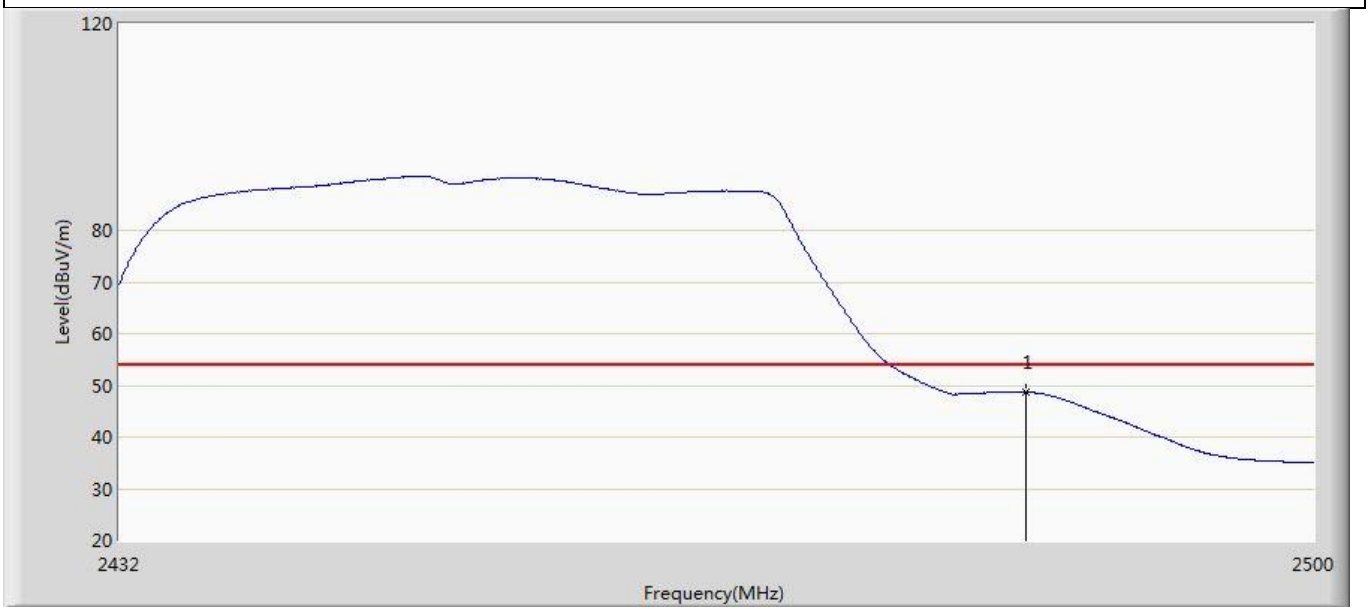


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	47.013	12.497	-6.987	54.000	34.516	AV

Profile: 2360694R	Page No.: 15
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) Ant1+2	

No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	61.219	26.703	-12.781	74.000	34.516	PK

Profile: 2360694R	Page No.: 16
Engineer: RenZhang	
Site: AC5	Time: 2023/09/06- 00:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: POS	Power: 120 Vac / 60 Hz
Note: Mode 4：Transmit at 2452MHz by 802.11n(40MHz) Ant1+2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	48.749	14.233	-5.251	54.000	34.516	AV

Note : We have evaluated SISO, MIMO mode, shown in the report is the worst data.