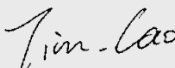
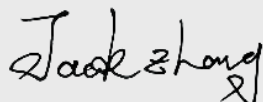


Test report No:
2290864R-RF-US-P06V02

FCC & ISED TEST REPORT

Product Name	Electronic fence receiver
Trademark	CFMOTO
Model and /or type reference	CFEF-433AR
FCC ID	2A9ABCFEF-433AR
Applicant's name / address	ZHEJIANG CFMOTO POWER CO.,LTD. No.116,Wuzhou Road,Yuhang Economic Development Zone,Hangzhou City,Zhejiang
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 KDB558074 D01 15.247 Meas Guidance v05r02
Verdict Summary	IN COMPLIANCE
Tested by (name / position & signature)	Tim Cao/ Project Engineer 
Approved by (name / position & signature)	Jack Zhang/ Manager 
Date of issue	2022-12-03
Report Version	V2.0
Report template No	Template_FCC 15.247-RF-V1.0

INDEX

	page
General conditions	4
Environmental conditions	4
Possible test case verdicts	5
Abbreviations	5
Document History	6
Remarks and Comments.....	6
Used Equipment	7
Uncertainty	9
1 General Information.....	10
1.1 General Description of the Item(s)	10
1.2 Antenna Information	11
1.3 Channel List	12
2 Description of Test Setup	13
2.1 Operating mode(s) used for tests.....	13
2.2 Accessories Information	13
2.3 Auxiliary equipment / Test software for the EUT.....	13
2.4 Test Configuration / Block diagram used for tests	14
2.5 Testing process.....	15
3 Verdict summary section	16
3.1 Standards.....	16
3.2 Deviation(s) from the Standard(s) / Test Specification(s).....	16
3.3 Overview of results.....	17
3.4 Test Facility.....	18
4 Test Results.....	19
4.1 Emissions in restricted frequency bands	22
4.1.1 Limit	22
4.1.2 Test Setup.....	24
4.1.3 Test Procedure.....	25
4.1.4 Test Data	26
4.2 Emissions in non-restricted frequency band.....	52
4.2.1 Limit	52
4.2.2 Test Setup.....	52
4.2.3 Test Procedure.....	52
4.2.4 Test Data	53

4.3	Duty cycle	55
4.3.1	Limit	55
4.3.2	Test Setup.....	55
4.3.3	Test Procedure.....	55
4.3.4	Test Data	56
4.4	Band Edge	57
4.4.1	Limit	57
4.4.2	Test Setup.....	57
4.4.3	Test Procedure.....	57
4.4.4	Test Data	58
4.5	DTS Bandwidth	90
4.5.1	Limit	90
4.5.2	Test Setup.....	90
4.5.3	Test Procedure.....	90
4.5.4	Test Data	91
4.6	Fundamental emission output power	92
4.6.1	Limit	92
4.6.2	Test Setup.....	92
4.6.3	Test Procedure.....	93
4.6.4	Test Data	94
4.7	Power Density	95
4.7.1	Limit:	95
4.7.2	Test Setup.....	95
4.7.3	Test Procedure.....	95
4.7.4	Test Data	96
4.8	Antenna Requirement.....	97
4.8.1	Limit:	97
4.8.2	Antenna Connector Construction:	97
5	Test setup photo and EUT Photo.....	98

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. 27, 2022
Date (start test)	Aug. 30, 2022
Date (finish test)	Nov. 03, 2022

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.

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
2290864R-RF-US-P06V02	V1.0	Initial issue of report.	2022-12-02
2290864R-RF-US-P06V02	V2.0	Update the applicant address, V1.0 has expired.	2022-12-03

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 Part 15 Subpart C Paragraph 15.247.
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 Information;
 - Chapter 1.3 Channel List.

USED EQUIPMENT

AC Power Line Conducted Emission / TR1

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100906	2022.09.04	2023.09.03
Two-Line V-Network	R&S	ENV216	101044	2022.03.12	2023.03.11
50ohm Termination	SHX	TF2	7081402	2022.09.04	2023.09.03
50ohm Termination	SHX	TF2	7081403	2022.09.04	2023.09.03
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2022.07.07	2023.07.06
Dekra test software	Dekra	-	-	-	-

Emissions in non-restricted frequency bands/ Occupied Bandwidth/ Fundamental emission output power/ Power Spectral Density/Band Edge/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
MAX Signal Analyzer	Agilent	N9020A	MY49100159	2021.11.17	2022.11.16
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2021.11.18	2022.11.17
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2022.07.07	2023.07.06
Tonscend test software	Tonscend	-	-	-	-

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2022.09.17	2023.09.16
Loop Antenna	R&S	HFH2-Z2	833799/003	2022.04.15	2023.04.14
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2021.12.03	2022.12.02
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2022.07.07	2023.07.06
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2022.03.21	2023.03.20
Dekra test software	Dekra	-	-	-	-

Radiated Emission(1GHz-40GHz) / AC5

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Spectrum Analyzer	Keysight	N9010A	MY48030494	2021.12.15	2022.12.14
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2021.12.13	2022.12.12
Preamplifier	CHENGYI	EMC184045SE	980263	2022.05.21	2023.05.20
DRG Horn	ETS-Lindgren	3117	00167055	2022.08.29	2023.08.28
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2022.05.19	2023.05.18
Loop Antenna	R&S	HFH2-Z2	833799/003	2022.04.15	2023.04.14
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2022.03.21	2023.03.20
Dekra test software	Dekra	-	-	-	-

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%. The Uncertainties is comply with standard required as below.

Test item	Uncertainty
AC Power Line Conducted Emission	9kHz~150kHz: 2.80dB 150kHz~30MHz: 2.40dB
Peak Power Output	± 1.27 dB
Radiated Emission(30MHz~1GHz)	Horizontal: 30MHz~200MHz: 3.50 dB 300MHz~1GHz: 3.60 dB Vertical: 30MHz~200MHz: 3.60 dB 300MHz~1GHz: 3.50 dB
Radiated Emission(1GHz~26.5GHz)	Horizontal: 1GHz~18GHz: 5.00 dB Vertical: 1GHz~18GHz: 4.80 dB
RF antenna conducted test	± 1.27 dB
Radiated Emission Band Edge	± 3.9 dB
DTS Bandwidth	± 150 Hz
Occupied Bandwidth	± 1 kHz
Power Density	± 1.27 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name..... :	Electronic fence receiver
Model No. :	CFEF-433AR
FCC ID :	2A9ABCFEF-433AR
Manufacturer..... :	Shenzhen Yuanlai Intelligent Equipment Co., Ltd
Manufacturer Address..... :	103, building 27, Yingshui villa, Minle community, Minzhi street, Longhua District, Shenzhen
Model Difference(s)..... :	N/A

Wireless specification..... :	Bluetooth 5.0					
Operating frequency range(s)..... :	2402~2480 MHz					
Type of Modulation..... :	GFSK					
PHYs :	☒	LE 1M	☒	LE 2M	☒	LE Coded S=2/8
Data Rate :	☒	1Mbit/s	☒	2Mbit/s	☒	500/125 Kbit/s
Number of channel..... :	40					

Rated power supply	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☐	AC: 120 V, 50/60 Hz
	☒	DC: 12V
	☐	Adapter:.....
	☐	Battery:.....
Mounting position	☐	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Head-mounted equipment
	☒	Other:

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
			☐ PCB
	☒	Internal	☐ PIFA
			☒ PCB
			☐ Dipole
			☐ Others.....
Antenna Gain	1.0 dBi		

1.3 Channel List

Bluetooth Working Frequency of Each Channel(LE):							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

Note: The general description of the Item(s), antenna information 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 For Bluetooth	Mode1: Transmit by LE_1Mbps
	Mode2: Transmit by LE_2Mbps
	Mode3: Transmit by LE_Coded S=2
	Mode4: Transmit by LE_Coded S=8

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

2.2 Accessories Information

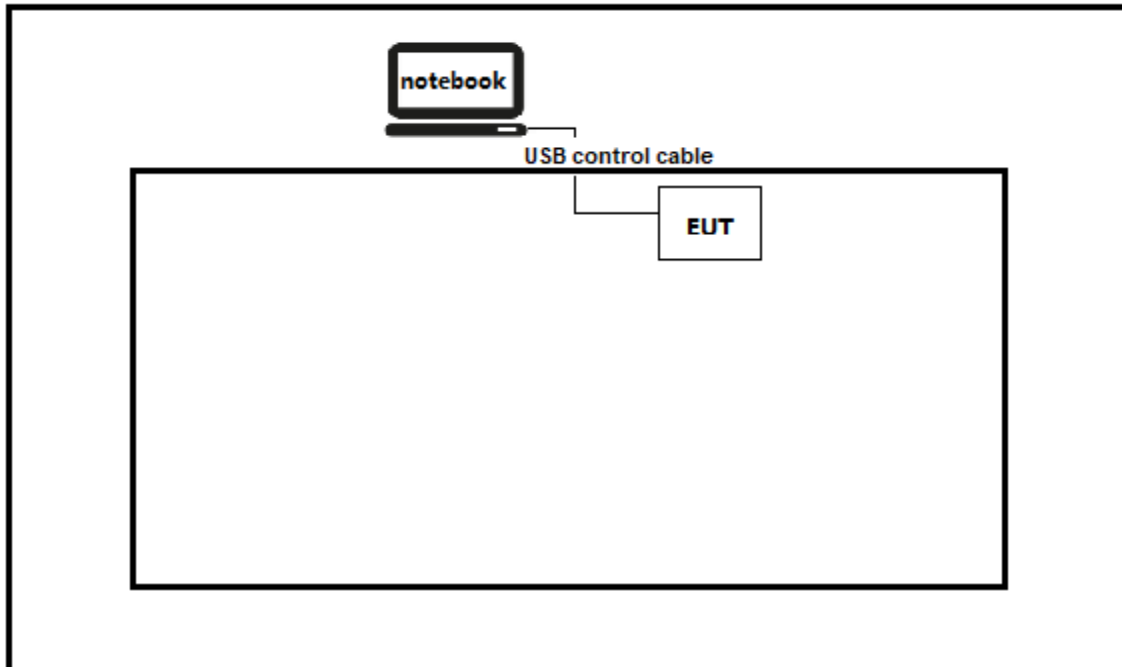
Accessories Information	Brand/model name	Cable		
		Length used during test [m]	Attached during test	Shielded
USB Cable	N/A	10	☒	☒
USB Cable	N/A	0.5	☒	☒

2.3 Auxiliary equipment / Test software for the EUT

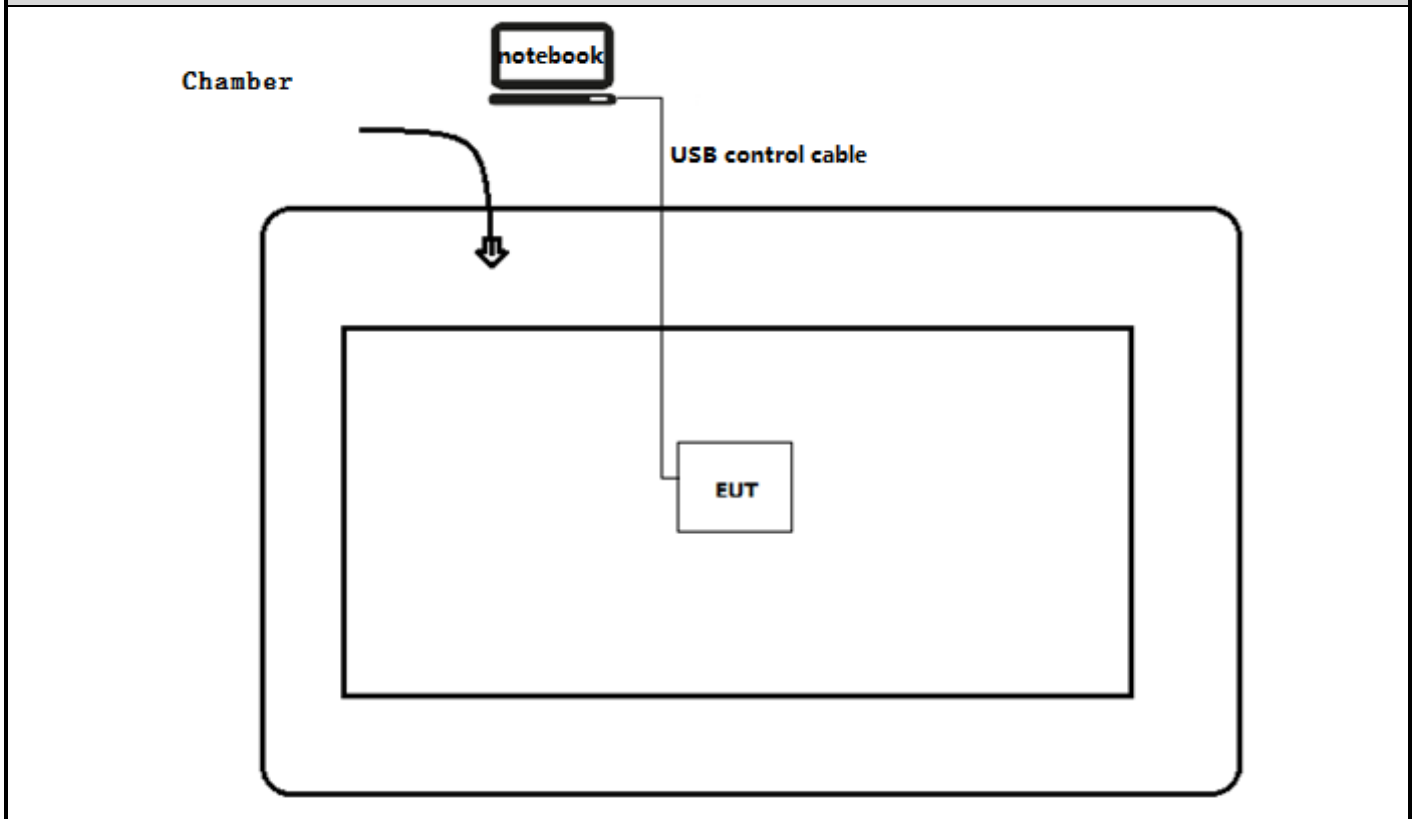
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	Think pad x280	Lenovo	N/A
Software	Type / Version	Manufacturer	Supplied by
ApprobationTool	1.5.6	N/A	N/A

2.4 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2.5 Testing process

1	Setup the EUT as shown in Section 2.4.
2	Run the software “ApprobationTool” 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	2020	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
KDB558074 D01 v05r02	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 for Compliance of Radio Apparatus
RSS-247 Issue 2	2017	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

For FCC

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	FCC 15.207	PASS	---
Emissions in restricted frequency bands	FCC 15.247(b)(3)	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d), FCC 15.209	PASS	---
Band Edge	FCC 15.247(d)	PASS	---
Fundamental emission output power	FCC 15.247(d), FCC 15.209	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---

3.4 Test Facility

USA : FCC Designation Number: CN1199

4 TEST RESULTS

4.1 AC Power Line Conducted Emission

VERDICT: PASS

4.1.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.207	
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

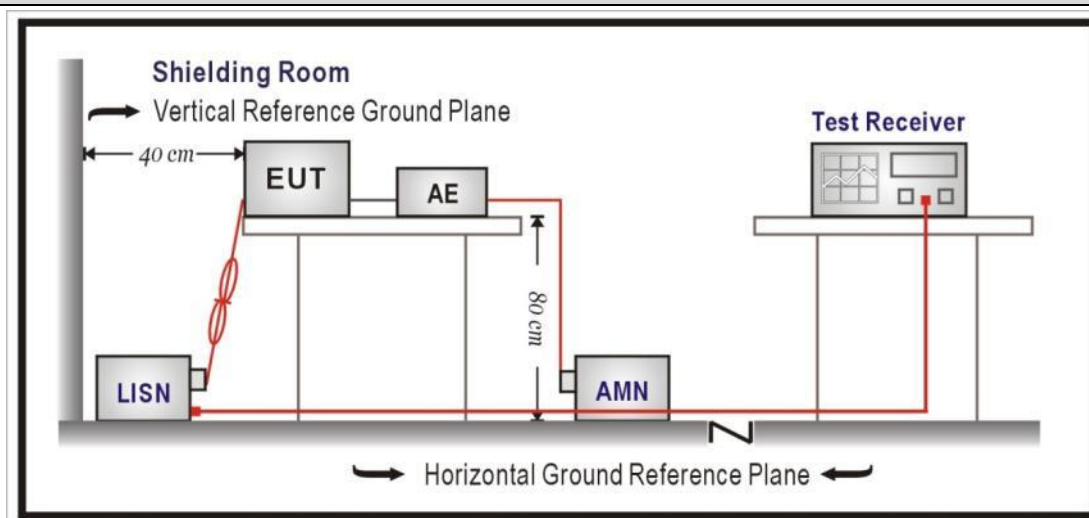
¹⁾ At the transition frequency, the lower limit applies.

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.

4.1.2 Test Setup

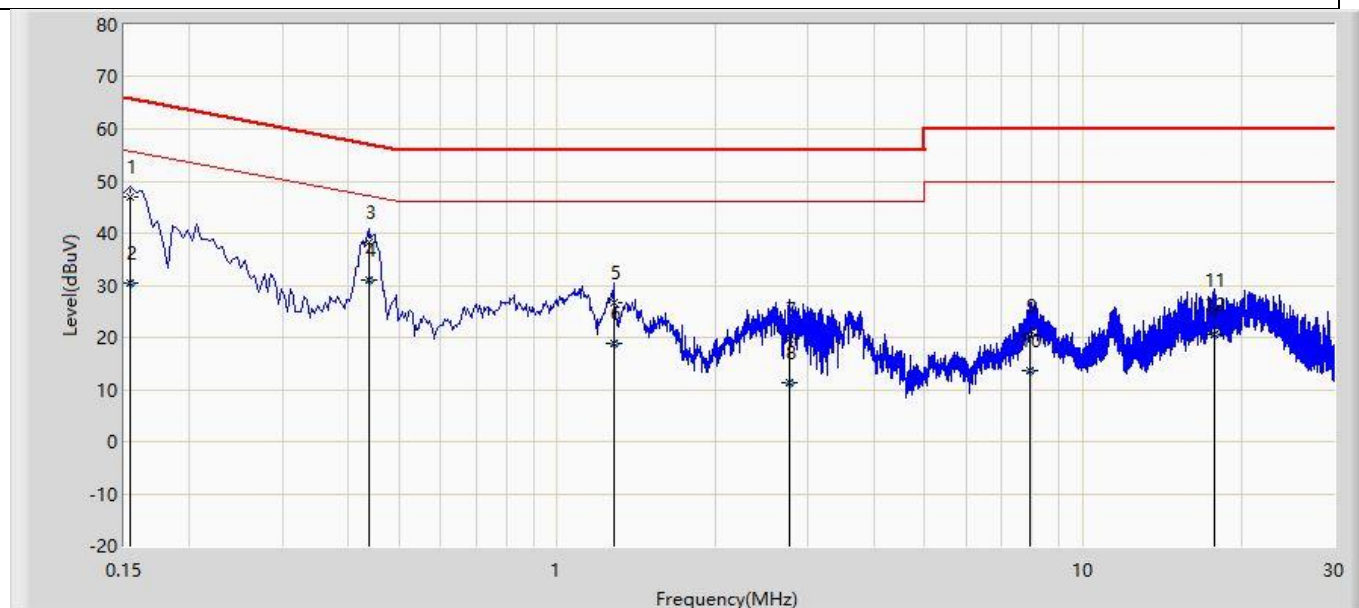


4.1.3 Test Procedure

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

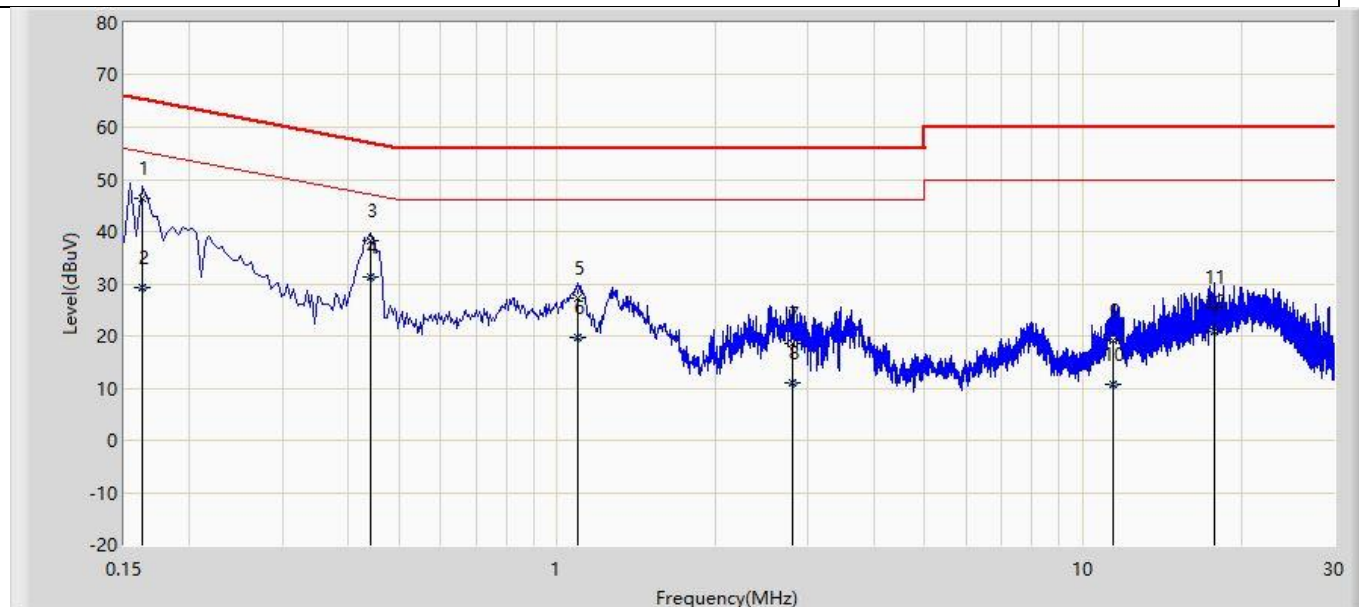
4.1.4 Test Data

Profile: 2290864R	Page No.: 14
Engineer: RenZhang	
Site: TR1	Time: 2022/06/28 - 19:32
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.154	46.921	37.342	-18.861	65.781	9.550	0.028	0.000	QP
2		0.154	30.481	20.903	-25.300	55.781	9.550	0.028	0.000	AV
3		0.438	38.184	28.567	-18.916	57.100	9.576	0.041	0.000	QP
4	*	0.438	31.062	21.445	-16.038	47.100	9.576	0.041	0.000	AV
5		1.282	26.755	17.101	-29.245	56.000	9.590	0.064	0.000	QP
6		1.282	18.853	9.199	-27.147	46.000	9.590	0.064	0.000	AV
7		2.770	19.811	10.091	-36.189	56.000	9.610	0.109	0.000	QP
8		2.770	11.328	1.609	-34.672	46.000	9.610	0.109	0.000	AV
9		7.950	20.252	10.309	-39.748	60.000	9.762	0.181	0.000	QP
10		7.950	13.661	3.717	-36.339	50.000	9.762	0.181	0.000	AV
11		17.818	25.276	15.086	-34.724	60.000	9.920	0.271	0.000	QP
12		17.818	20.561	10.370	-29.439	50.000	9.920	0.271	0.000	AV

Profile: 2290864R	Page No.: 19
Engineer: RenZhang	
Site: TR1	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.207_CE_AC Power	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Probe (dB)	Cable (dB)	Amp (dB)	Type
1		0.162	46.267	36.696	-19.094	65.361	9.543	0.029	0.000	QP
2		0.162	29.298	19.727	-26.063	55.361	9.543	0.029	0.000	AV
3		0.442	38.280	28.665	-18.744	57.024	9.574	0.040	0.000	QP
4	*	0.442	31.255	21.641	-15.769	47.024	9.574	0.040	0.000	AV
5		1.094	27.184	17.535	-28.816	56.000	9.590	0.059	0.000	QP
6		1.094	19.848	10.198	-26.152	46.000	9.590	0.059	0.000	AV
7		2.806	18.644	8.930	-37.356	56.000	9.609	0.105	0.000	QP
8		2.806	10.885	1.172	-35.115	46.000	9.609	0.105	0.000	AV
9		11.414	19.095	9.045	-40.905	60.000	9.835	0.215	0.000	QP
10		11.414	10.789	0.739	-39.211	50.000	9.835	0.215	0.000	AV
11		17.818	25.525	15.310	-34.475	60.000	9.945	0.271	0.000	QP
12		17.818	20.860	10.644	-29.140	50.000	9.945	0.271	0.000	AV

4.2 Emissions in restricted frequency bands**VERDICT: PASS****4.2.1 Limit****Standard** FCC Part 15 Subpart C Paragraph 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	
13.36 – 13.41			

Restricted Band Emissions Limit

Frequency (MHz)	Field strength (μ V/m)	Field strength (dB μ V/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)

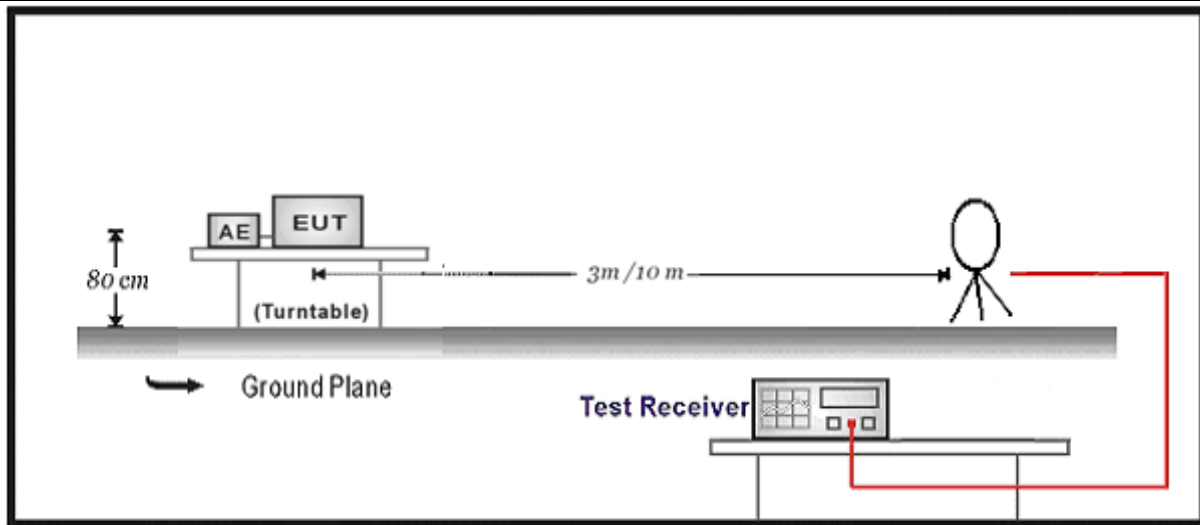
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed 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

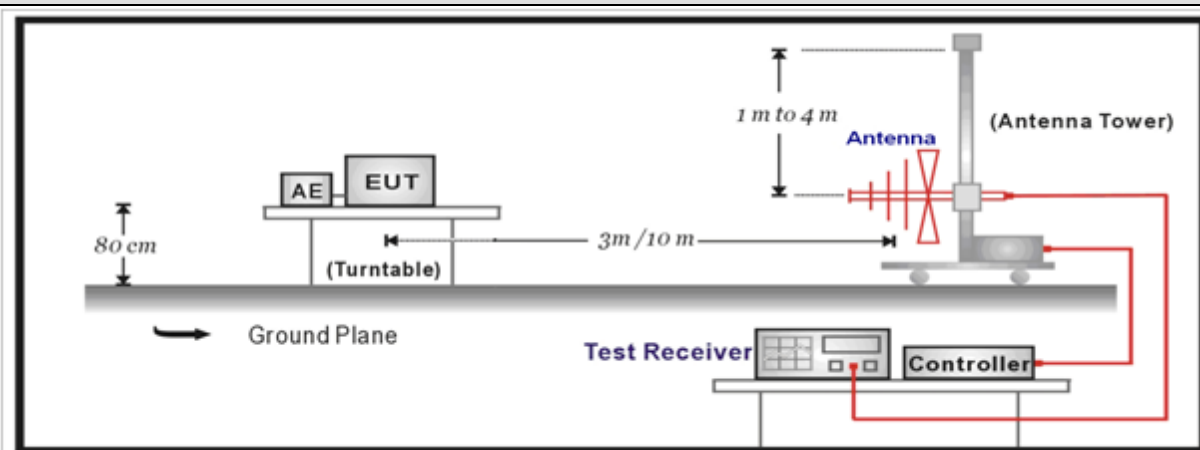
dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

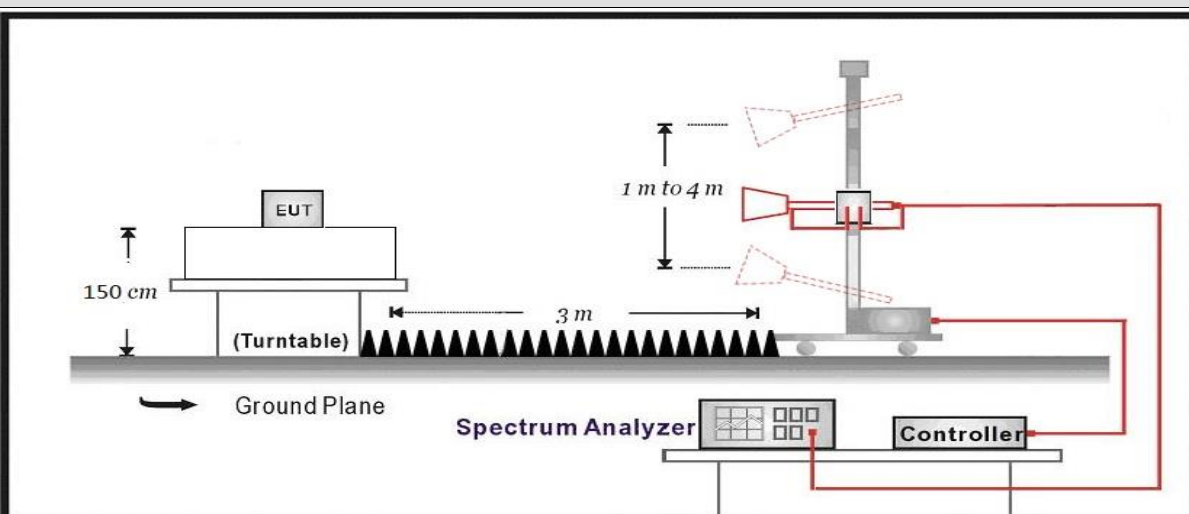
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:

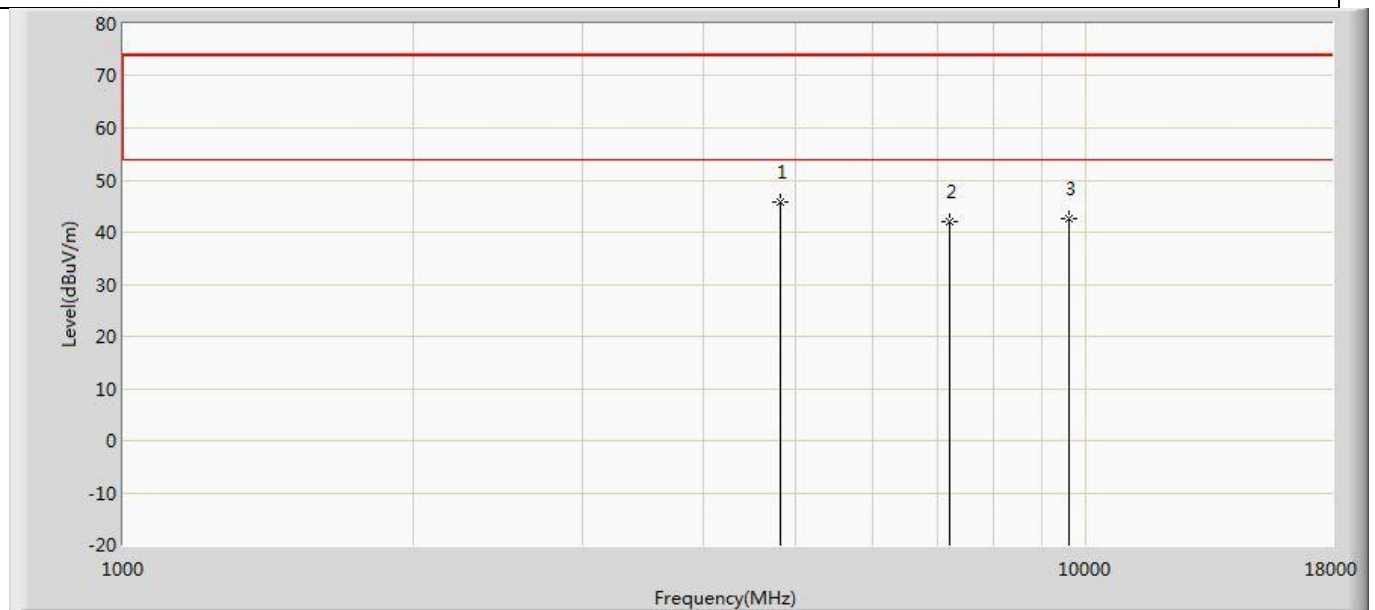


4.2.3 Test Procedure

	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	11.12.2.7	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

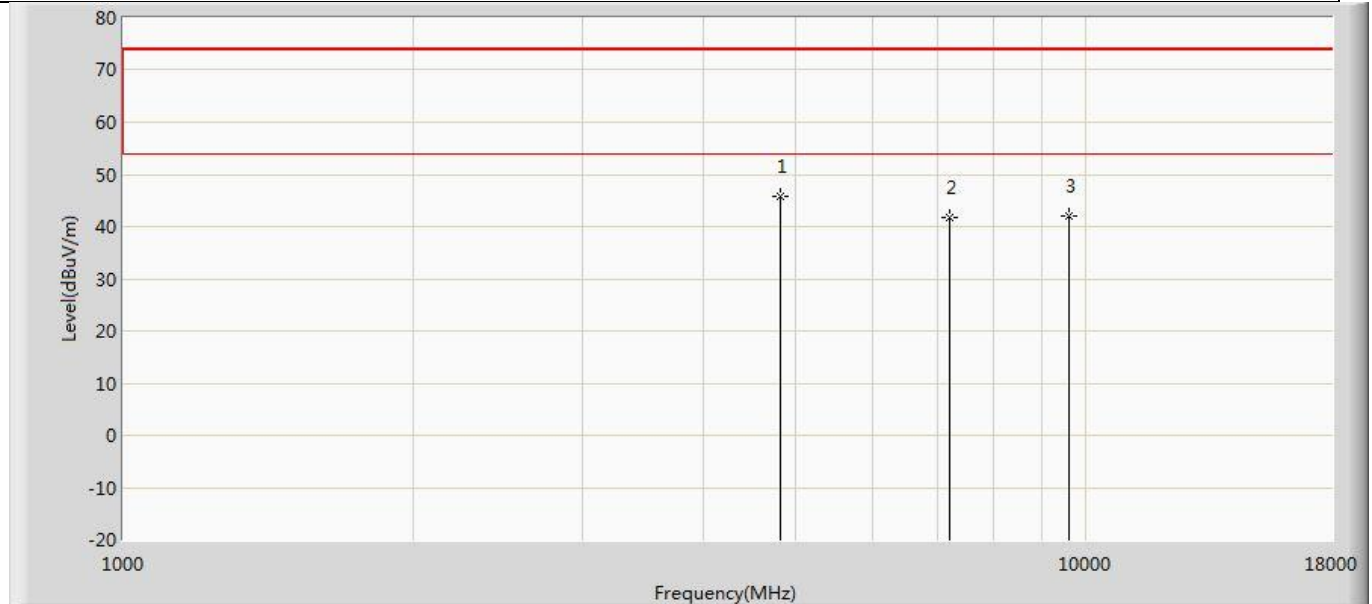
4.2.4 Test Data

Profile: 2290864R	Page No.: 25
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



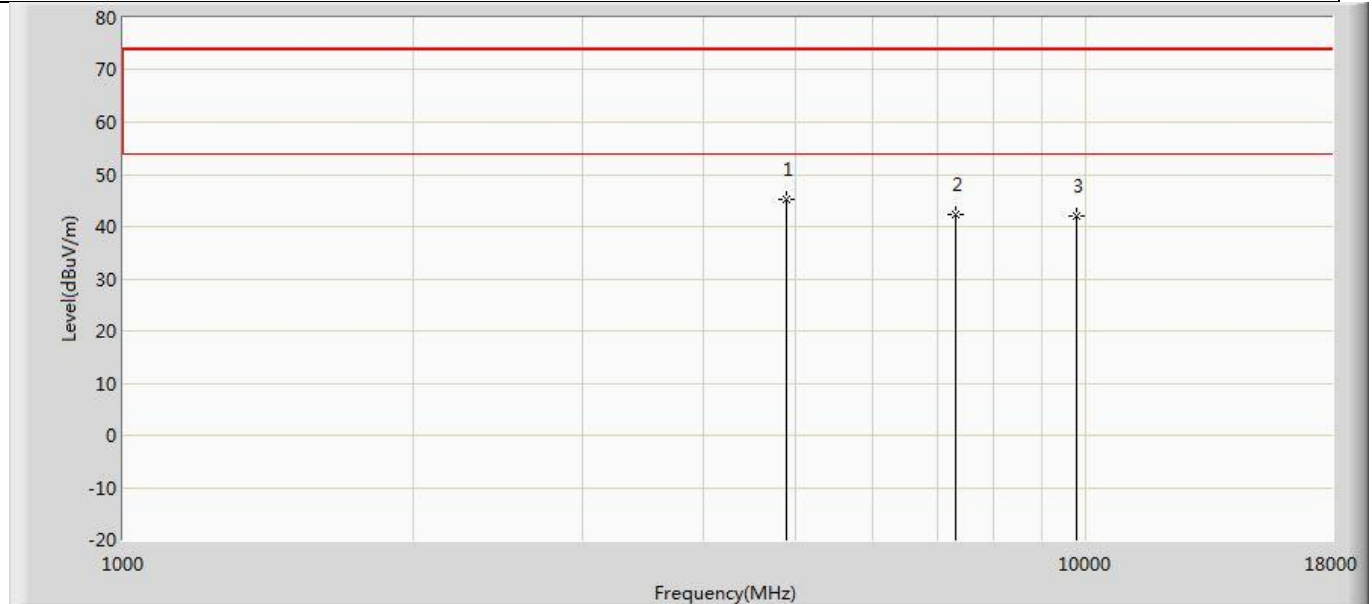
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	45.728	51.514	-28.272	74.000	-5.786	PK
2		7206.000	41.906	44.932	-32.094	74.000	-3.026	PK
3		9608.000	42.465	44.719	-31.535	74.000	-2.254	PK

Profile: 2290864R	Page No.: 26
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



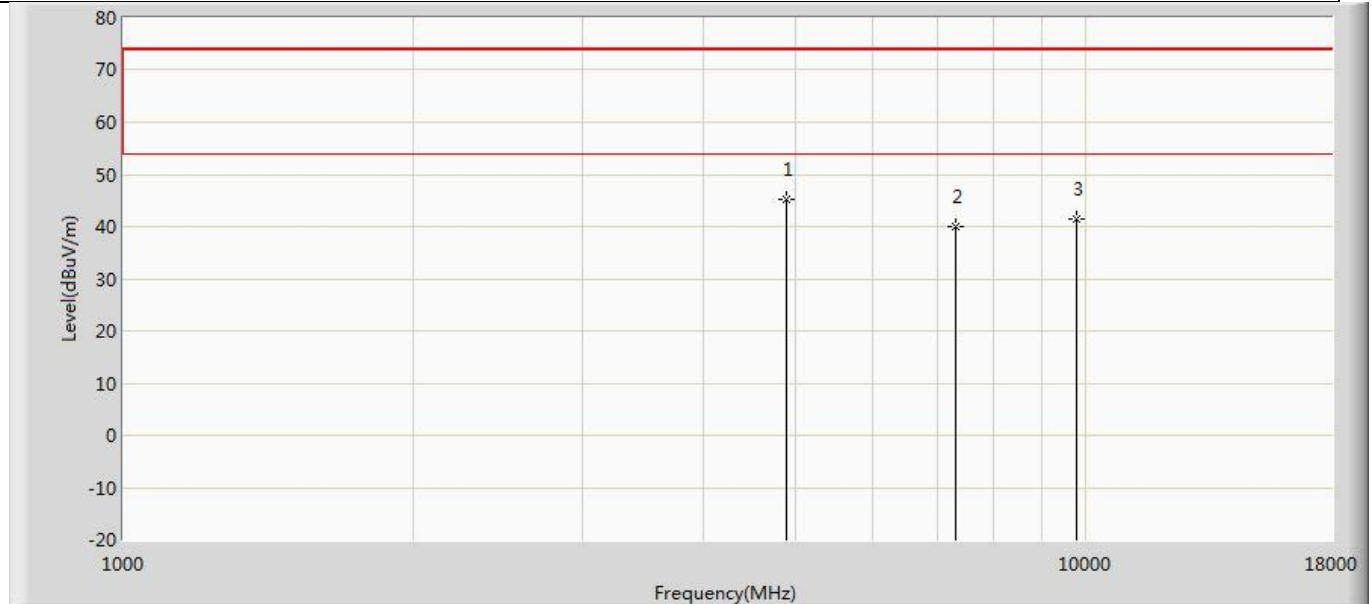
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	45.711	51.497	-28.289	74.000	-5.786	PK
2		7206.000	41.640	44.666	-32.360	74.000	-3.026	PK
3		9608.000	41.914	44.168	-32.086	74.000	-2.254	PK

Profile: 2290864R	Page No.: 27
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



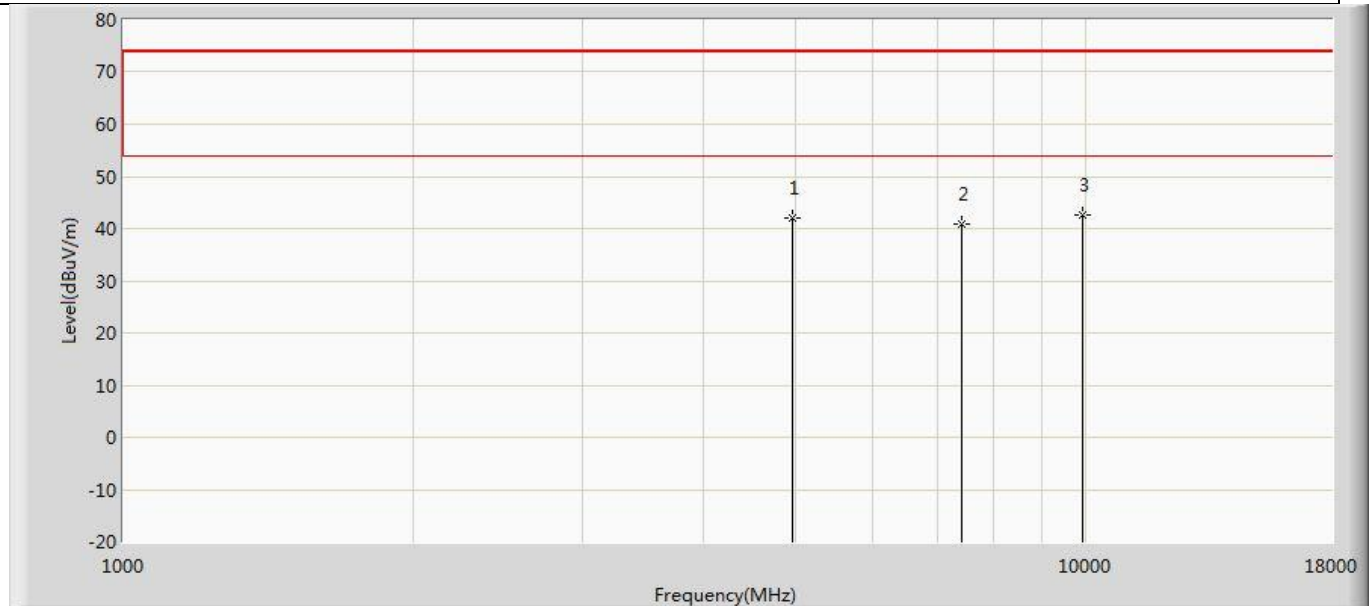
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.255	51.043	-28.745	74.000	-5.788	PK
2		7320.000	42.196	45.617	-31.804	74.000	-3.420	PK
3		9760.000	41.943	43.792	-32.057	74.000	-1.848	PK

Profile: 2290864R	Page No.: 28
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



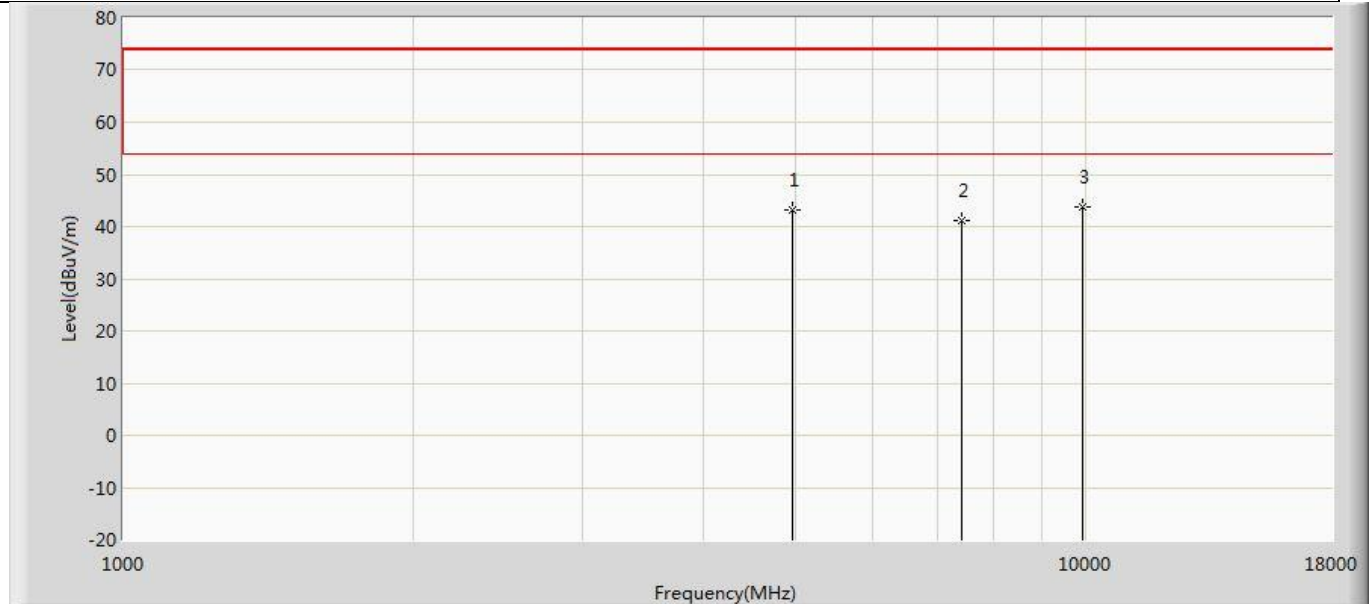
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.195	50.983	-28.805	74.000	-5.788	PK
2		7320.000	40.134	43.555	-33.866	74.000	-3.420	PK
3		9760.000	41.450	43.299	-32.550	74.000	-1.848	PK

Profile: 2290864R	Page No.: 29
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



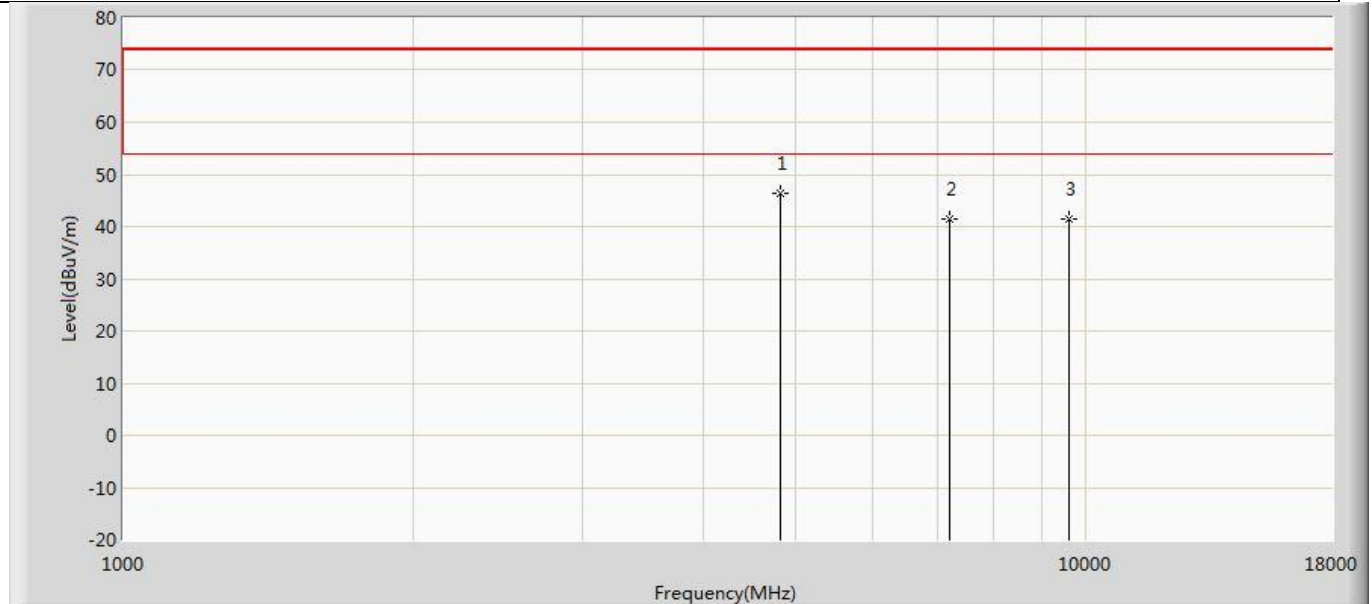
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4961.000	42.143	47.734	-31.857	74.000	-5.591	PK
2		7440.000	40.737	43.903	-33.263	74.000	-3.166	PK
3	*	9920.000	42.502	44.193	-31.498	74.000	-1.690	PK

Profile: 2290864R	Page No.: 30
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



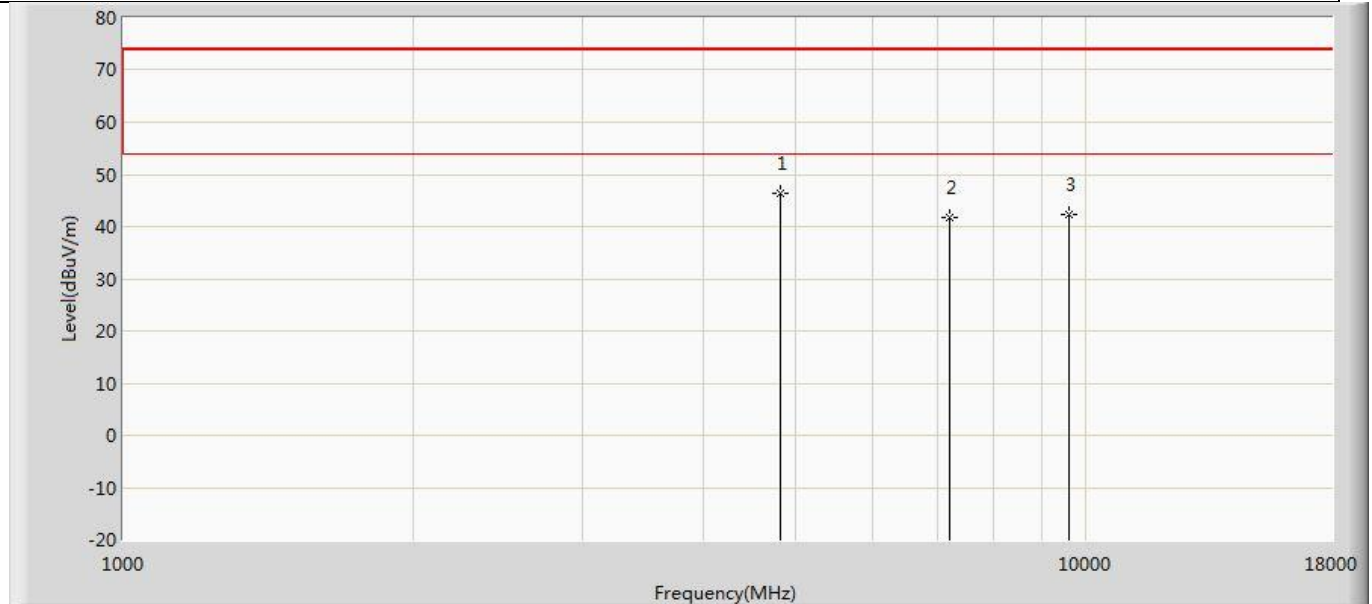
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4961.000	43.169	48.760	-30.831	74.000	-5.591	PK
2		7440.000	41.088	44.254	-32.912	74.000	-3.166	PK
3	*	9920.000	43.650	45.341	-30.350	74.000	-1.690	PK

Profile: 2290864R	Page No.: 31
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



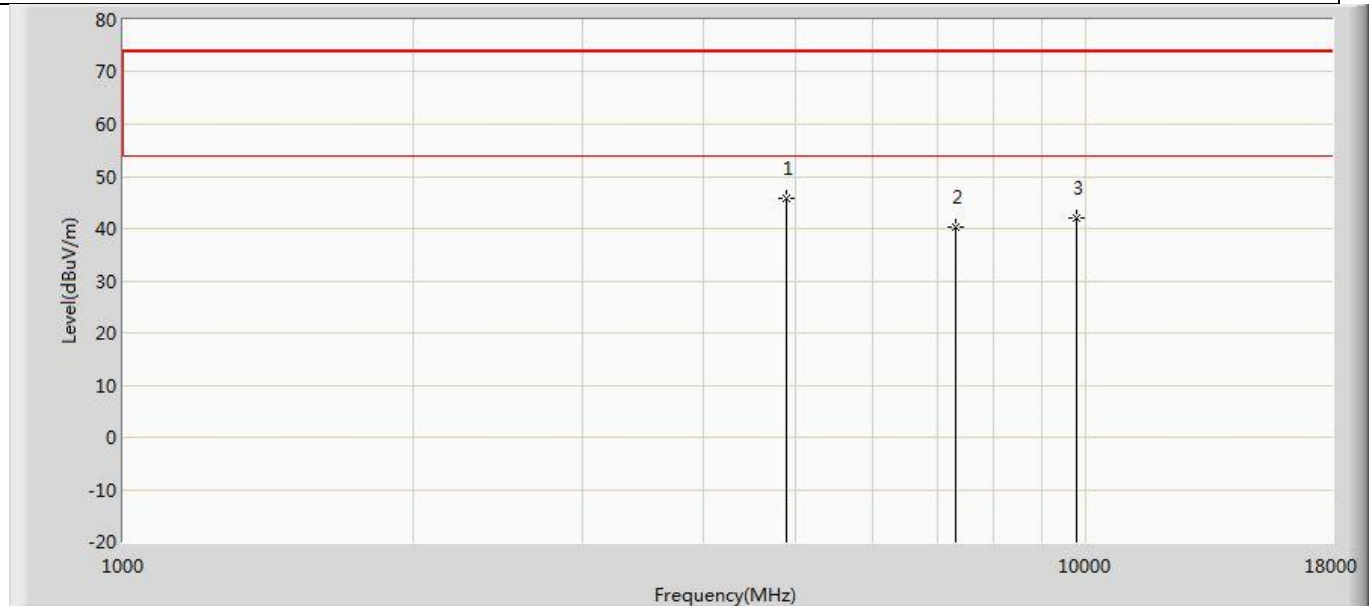
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.254	52.040	-27.746	74.000	-5.786	PK
2		7206.000	41.335	44.361	-32.665	74.000	-3.026	PK
3		9608.000	41.558	43.812	-32.442	74.000	-2.254	PK

Profile: 2290864R	Page No.: 32
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



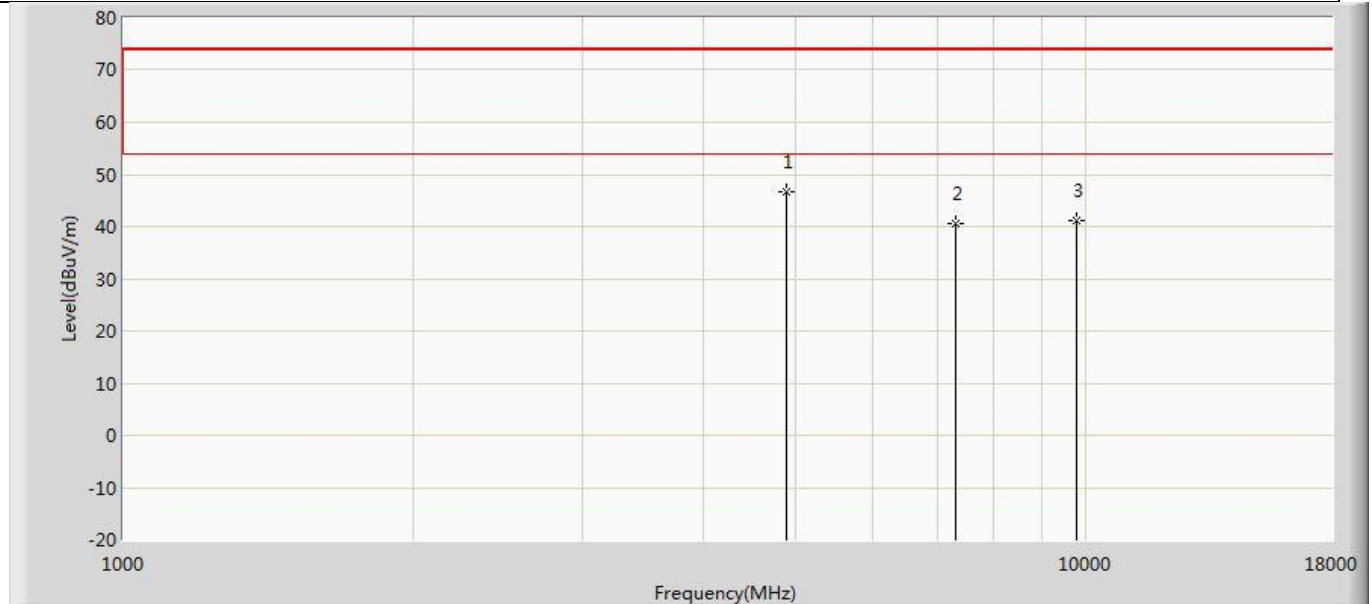
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.442	52.228	-27.558	74.000	-5.786	PK
2		7206.000	41.846	44.872	-32.154	74.000	-3.026	PK
3		9608.000	42.328	44.582	-31.672	74.000	-2.254	PK

Profile: 2290864R	Page No.: 33
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



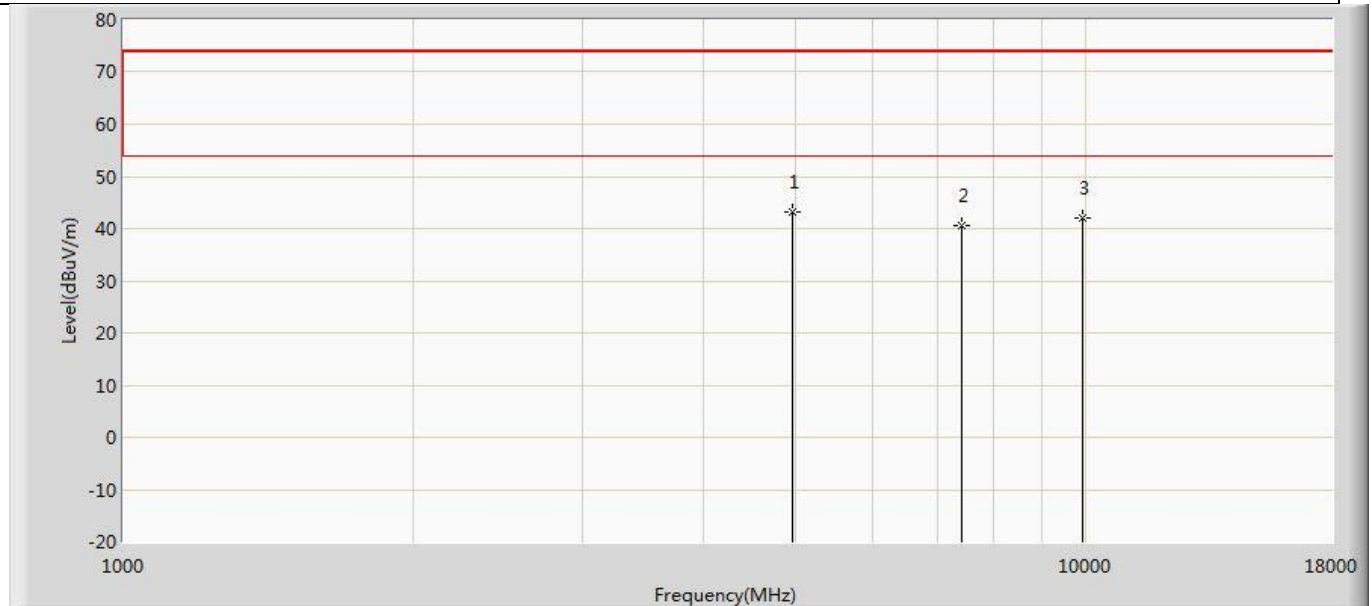
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.920	51.708	-28.080	74.000	-5.788	PK
2		7320.000	40.354	43.775	-33.646	74.000	-3.420	PK
3		9760.000	42.169	44.018	-31.831	74.000	-1.848	PK

Profile: 2290864R	Page No.: 34
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



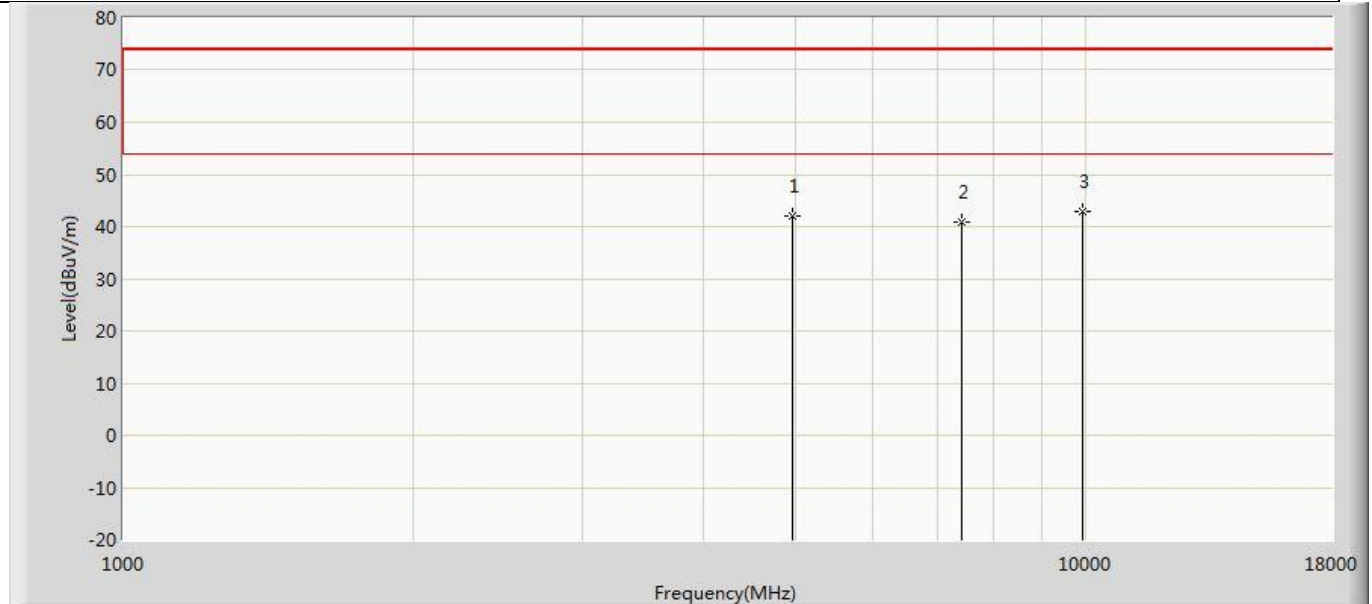
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	46.697	52.485	-27.303	74.000	-5.788	PK
2		7320.000	40.475	43.896	-33.525	74.000	-3.420	PK
3		9760.000	41.240	43.089	-32.760	74.000	-1.848	PK

Profile: 2290864R	Page No.: 35
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



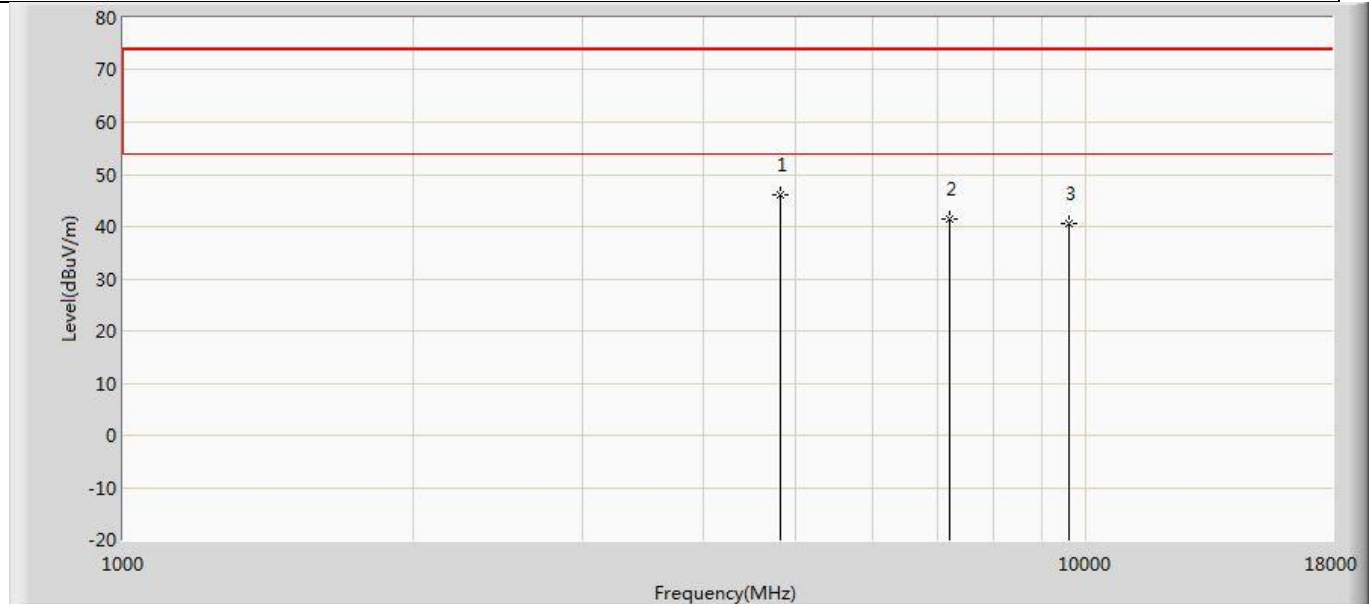
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	43.154	48.745	-30.846	74.000	-5.591	PK
2		7440.000	40.561	43.727	-33.439	74.000	-3.166	PK
3		9920.000	41.937	43.628	-32.063	74.000	-1.690	PK

Profile: 2290864R	Page No.: 36
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



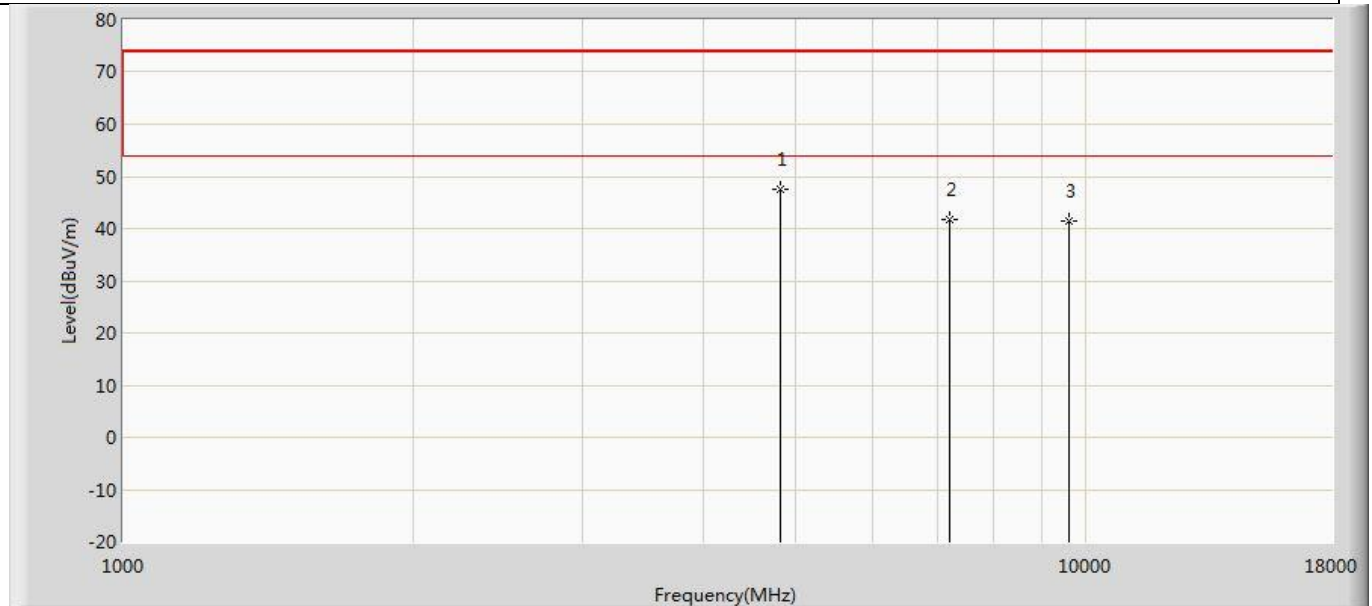
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4961.000	41.905	47.496	-32.095	74.000	-5.591	PK
2		7440.000	40.728	43.894	-33.272	74.000	-3.166	PK
3	*	9920.000	43.032	44.723	-30.968	74.000	-1.690	PK

Profile: 2290864R	Page No.: 37
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



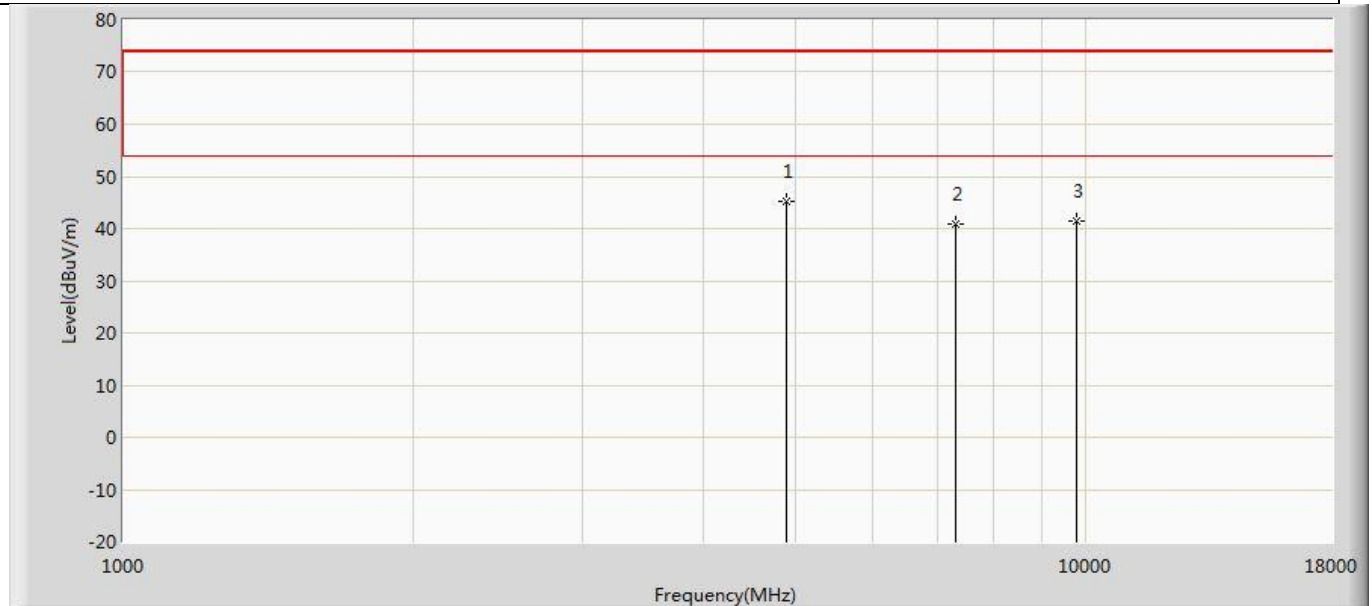
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.093	51.879	-27.907	74.000	-5.786	PK
2		7206.000	41.306	44.332	-32.694	74.000	-3.026	PK
3		9608.000	40.693	42.947	-33.307	74.000	-2.254	PK

Profile: 2290864R	Page No.: 38
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



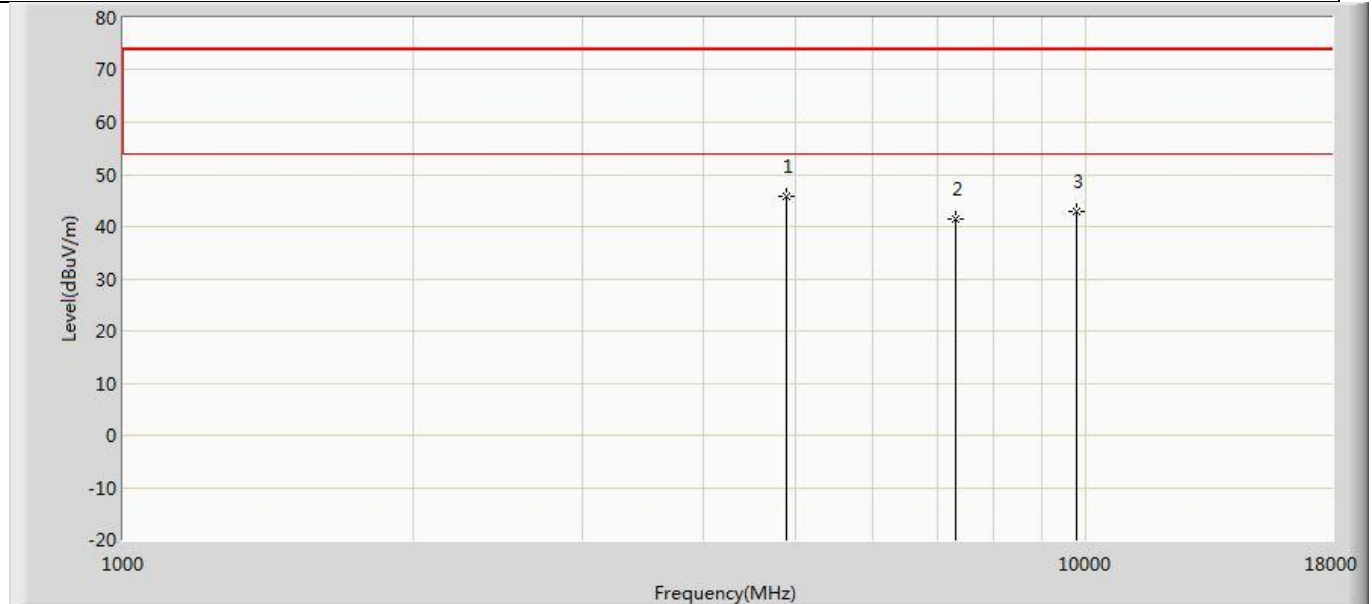
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.664	53.450	-26.336	74.000	-5.786	PK
2		7206.000	41.610	44.636	-32.390	74.000	-3.026	PK
3		9608.000	41.559	43.813	-32.441	74.000	-2.254	PK

Profile: 2290864R	Page No.: 39
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2440MHz by LE_Coded S=8	



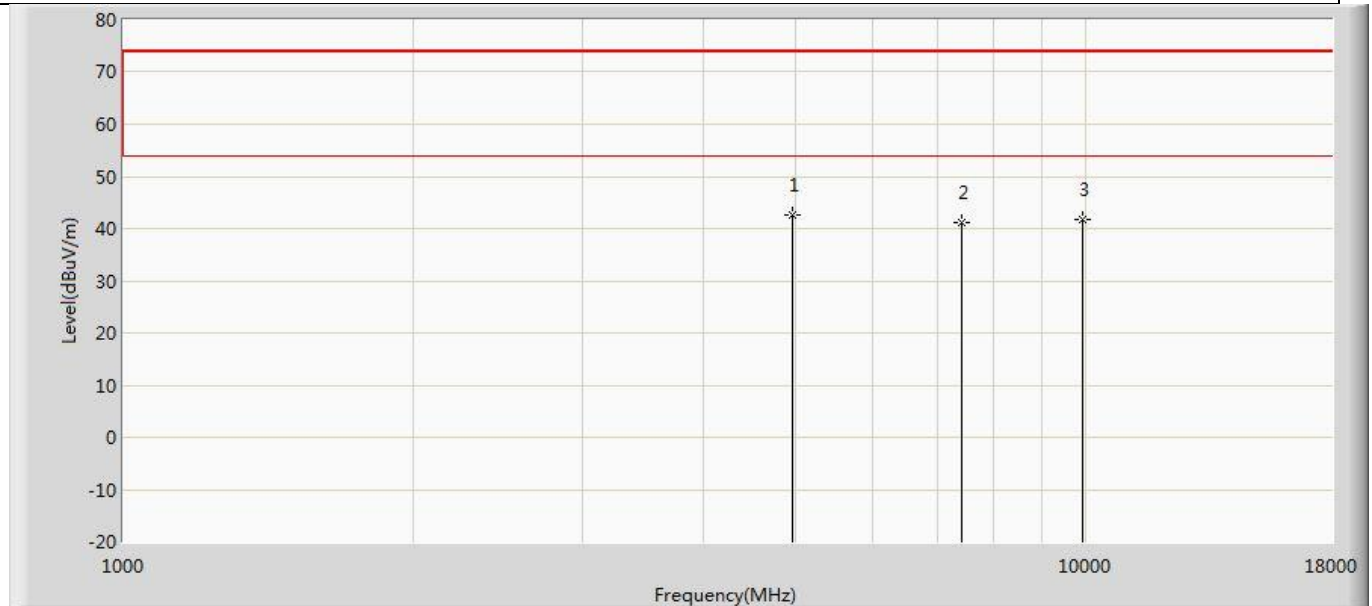
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.146	50.934	-28.854	74.000	-5.788	PK
2		7320.000	40.994	44.415	-33.006	74.000	-3.420	PK
3		9760.000	41.508	43.357	-32.492	74.000	-1.848	PK

Profile: 2290864R	Page No.: 40
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2440MHz by LE_Coded S=8	



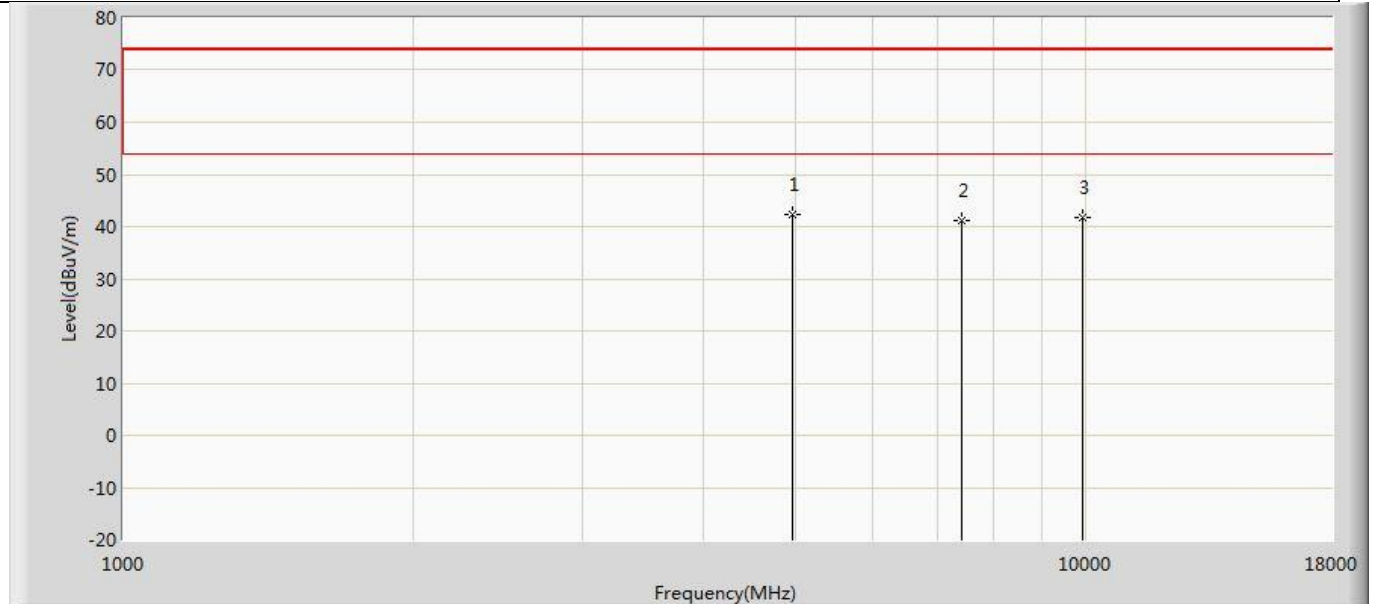
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.719	51.507	-28.281	74.000	-5.788	PK
2		7320.000	41.405	44.826	-32.595	74.000	-3.420	PK
3		9760.000	42.768	44.617	-31.232	74.000	-1.848	PK

Profile: 2290864R	Page No.: 41
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



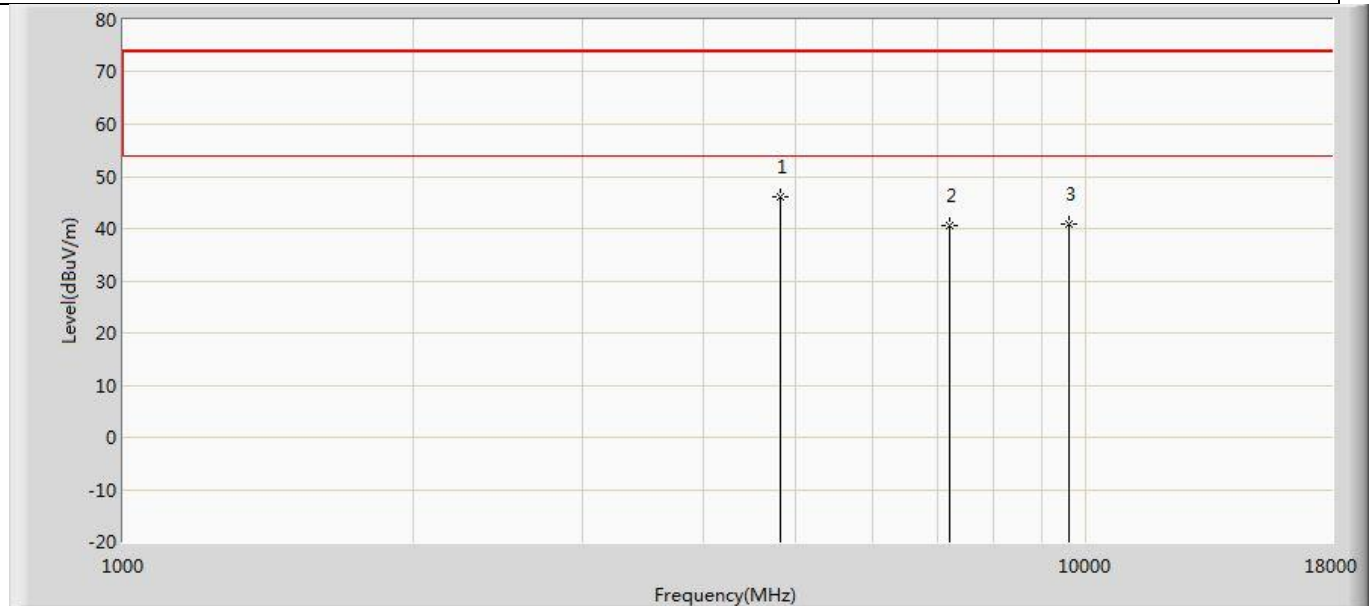
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	42.603	48.194	-31.397	74.000	-5.591	PK
2		7440.000	41.015	44.181	-32.985	74.000	-3.166	PK
3		9920.000	41.856	43.547	-32.144	74.000	-1.690	PK

Profile: 2290864R	Page No.: 42
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



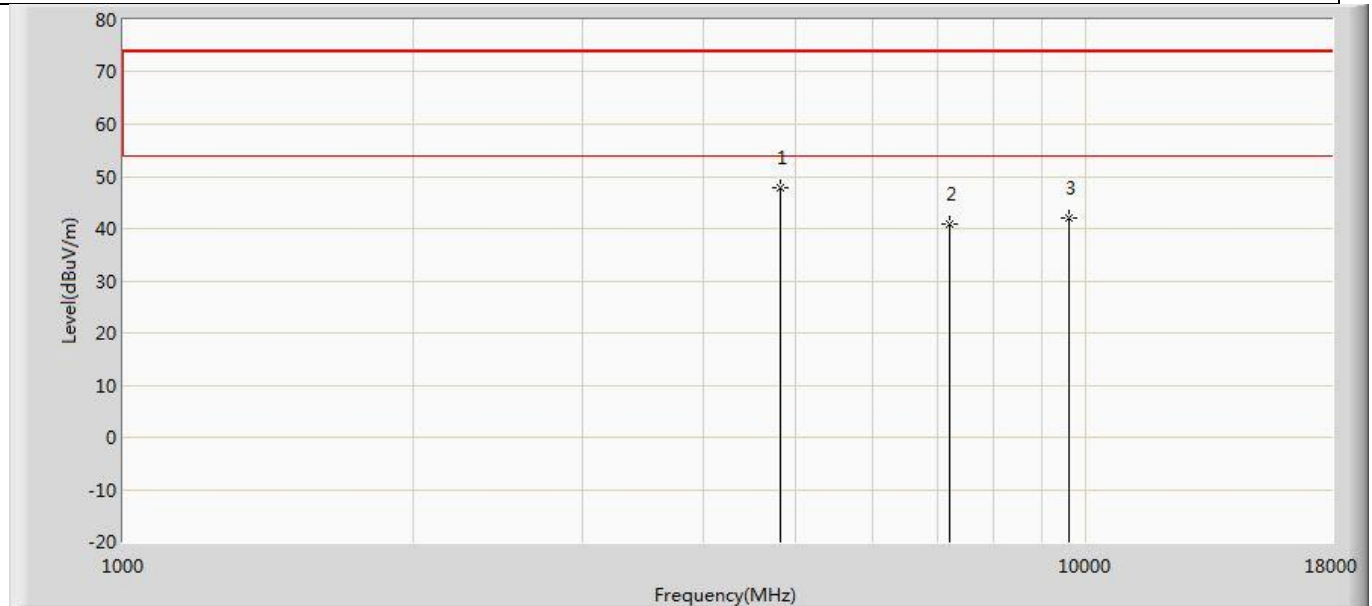
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	42.192	47.783	-31.808	74.000	-5.591	PK
2		7440.000	41.218	44.384	-32.782	74.000	-3.166	PK
3		9920.000	41.720	43.411	-32.280	74.000	-1.690	PK

Profile: 2290864R	Page No.: 43
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



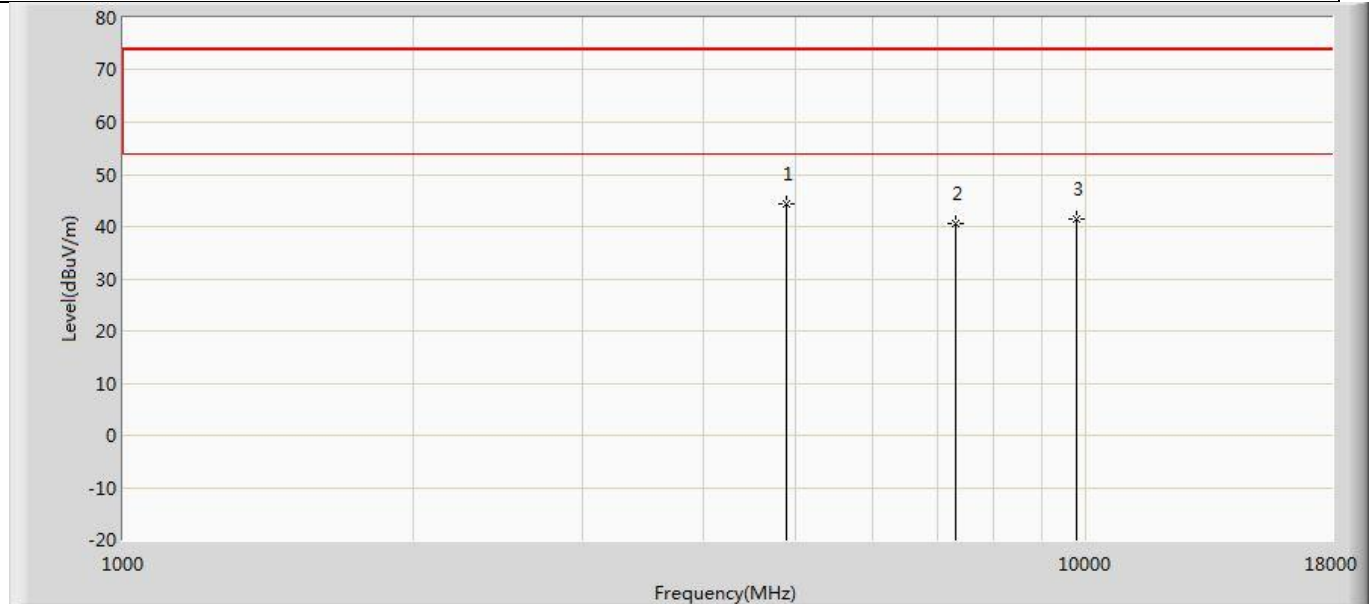
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.014	51.800	-27.986	74.000	-5.786	PK
2		7206.000	40.720	43.746	-33.280	74.000	-3.026	PK
3		9608.000	40.833	43.087	-33.167	74.000	-2.254	PK

Profile: 2290864R	Page No.: 44
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



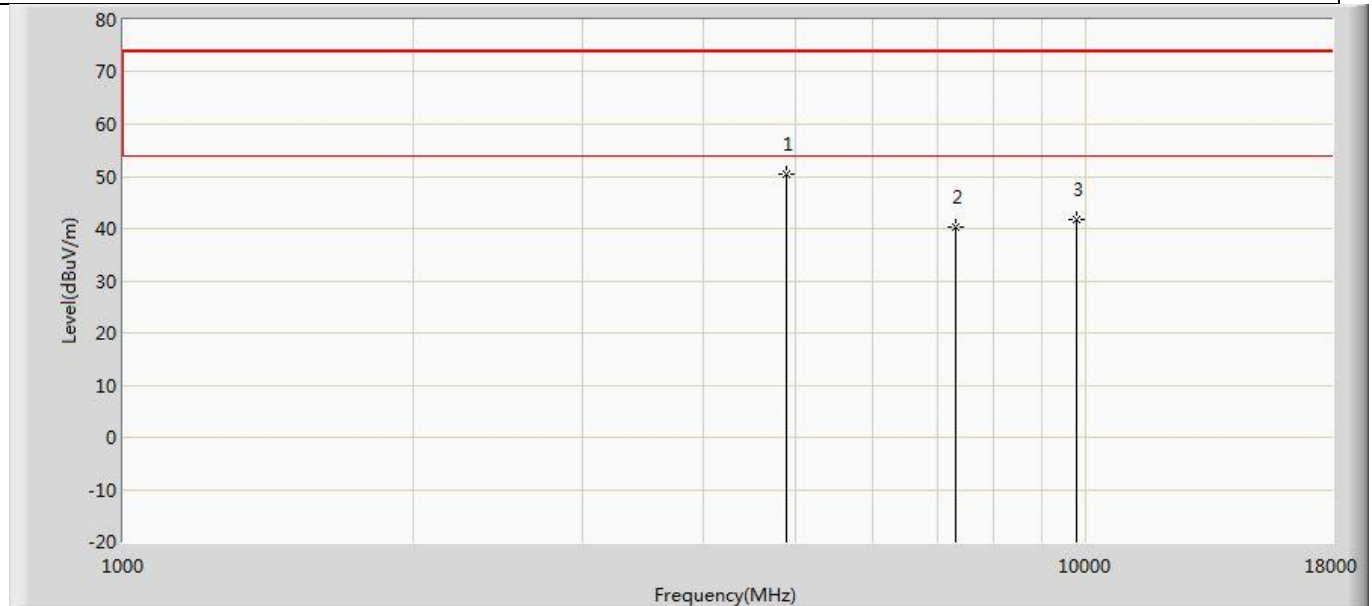
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.721	53.507	-26.279	74.000	-5.786	PK
2		7206.000	40.762	43.788	-33.238	74.000	-3.026	PK
3		9608.000	41.934	44.188	-32.066	74.000	-2.254	PK

Profile: 2290864R	Page No.: 45
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2440MHz by LE_Coded S=2	



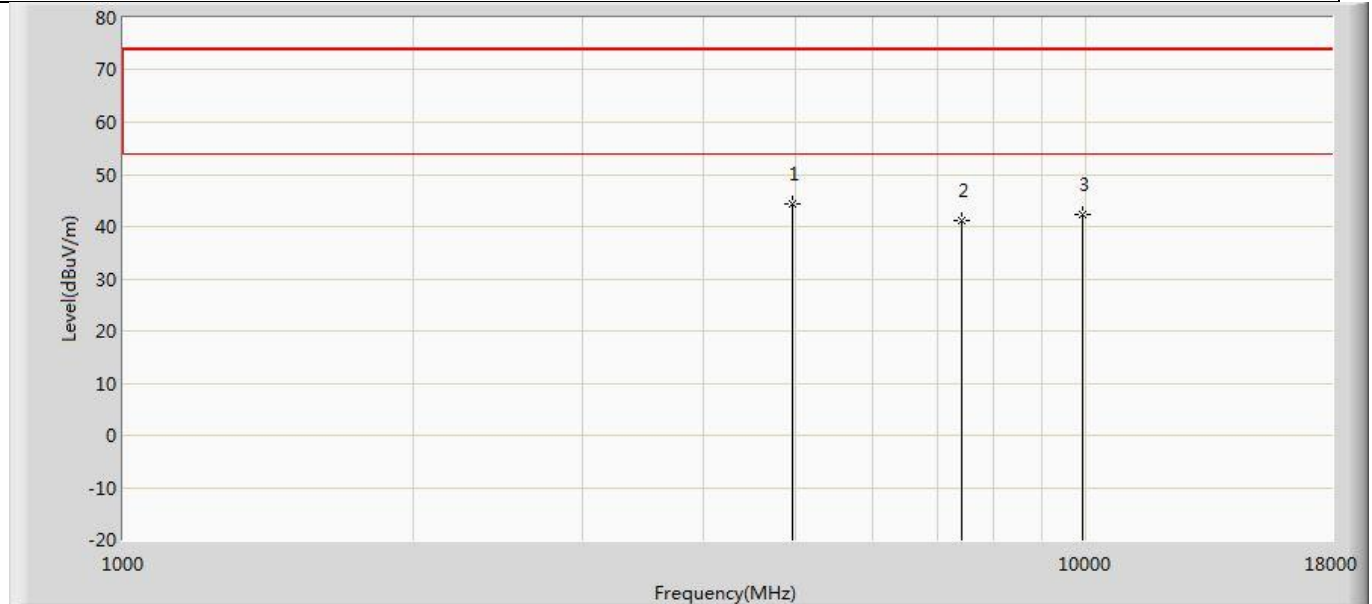
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	44.247	50.035	-29.753	74.000	-5.788	PK
2		7320.000	40.442	43.863	-33.558	74.000	-3.420	PK
3		9760.000	41.470	43.319	-32.530	74.000	-1.848	PK

Profile: 2290864R	Page No.: 46
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2440MHz by LE_Coded S=2	



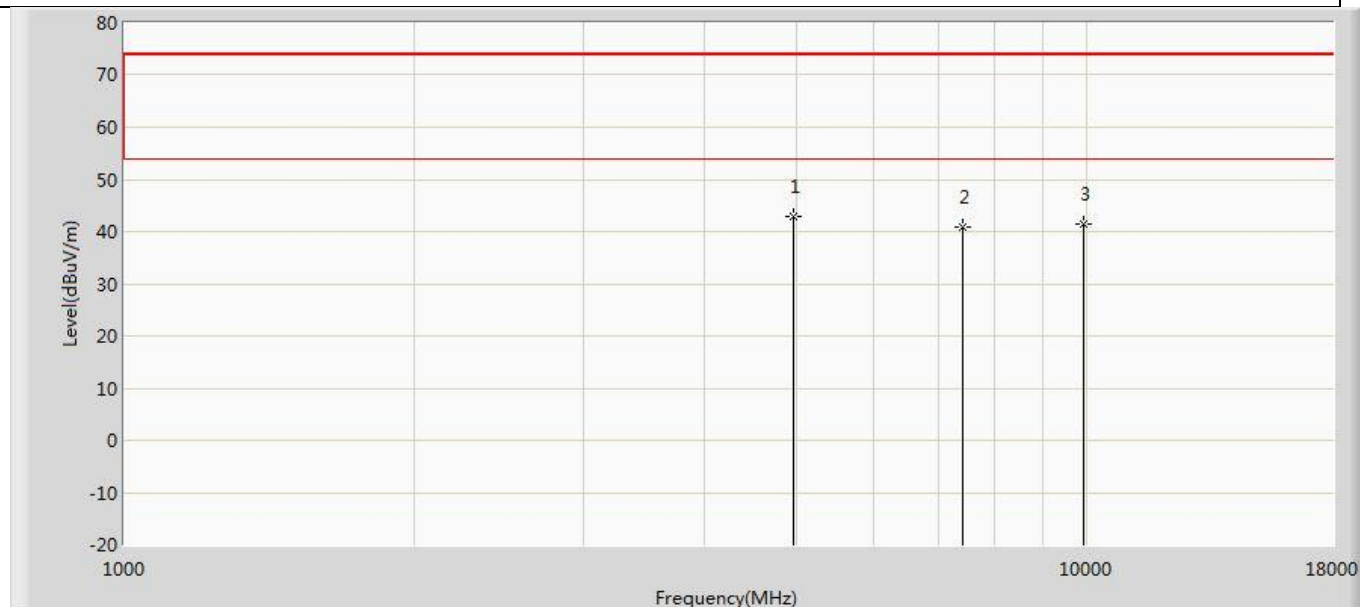
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	50.549	56.337	-23.451	74.000	-5.788	PK
2		7320.000	40.428	43.849	-33.572	74.000	-3.420	PK
3		9760.000	41.882	43.731	-32.118	74.000	-1.848	PK

Profile: 2290864R	Page No.: 47
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	44.418	50.009	-29.582	74.000	-5.591	PK
2		7440.000	41.150	44.316	-32.850	74.000	-3.166	PK
3		9920.000	42.336	44.027	-31.664	74.000	-1.690	PK

Profile: 2290864R	Page No.: 48
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 22:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



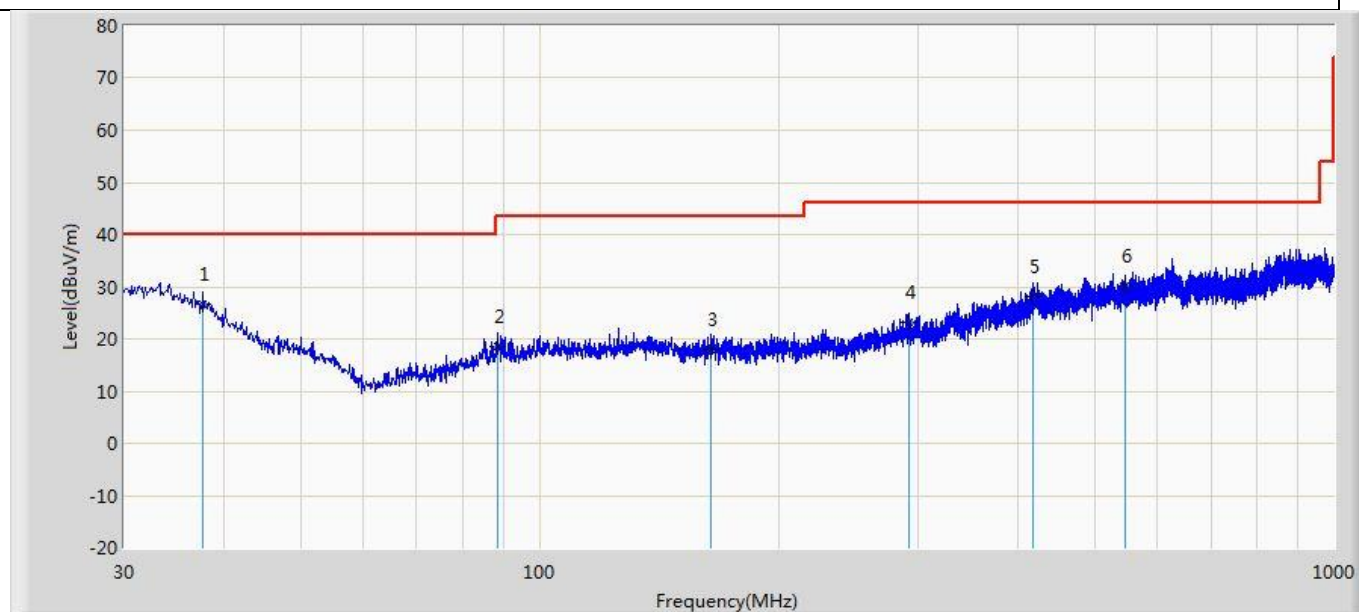
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	42.917	48.508	-31.083	74.000	-5.591	PK
2		7440.000	40.989	44.155	-33.011	74.000	-3.166	PK
3		9920.000	41.537	43.228	-32.463	74.000	-1.690	PK

Note:

1. Measured Level = Reading Level + Factor.
2. The test frequency range, 9kHz~30MHz, worst case are at least 20dB below the limits, therefore no data appear in the report.
3. The test frequency range, 18GHz~26GHz test result on peak is lower than average limit, all is the noise base, therefore no data appear in the report.
4. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
5. As the radiated emission was performed, so conducted emission was not tested.

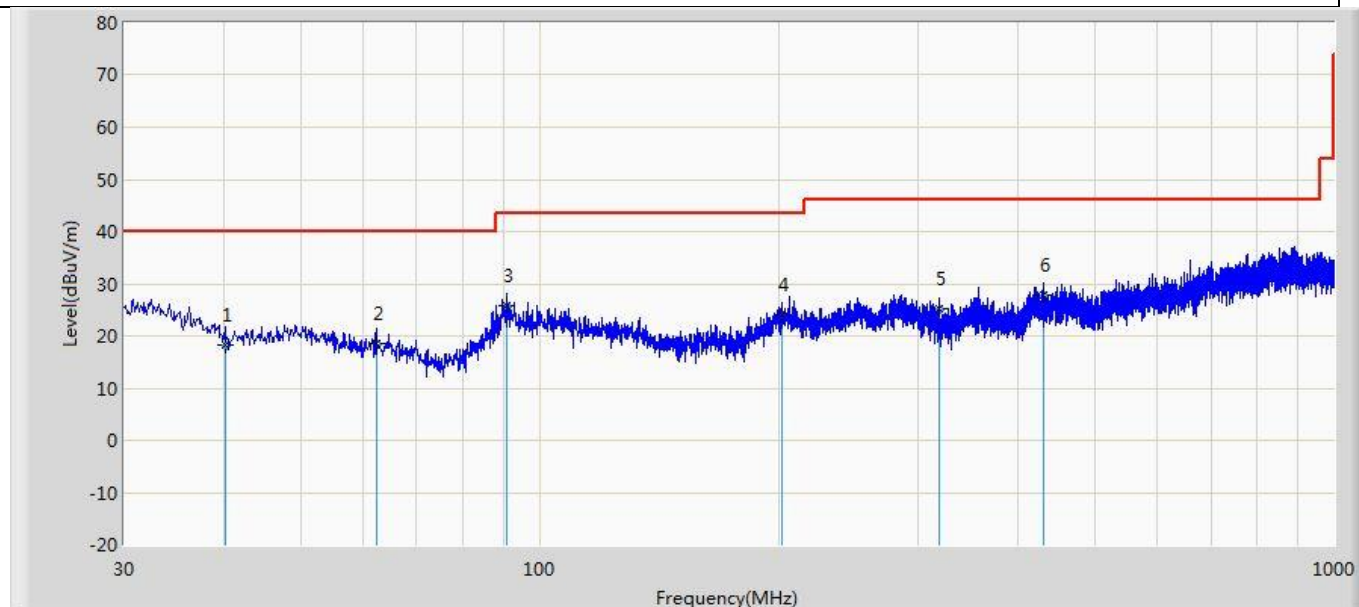
The worst case of Radiated Emission below 1GHz:

Profile: 2290864R	Page No.: 3
Engineer: RenZhang	
Site: AC2	Time: 2022/10/19 - 00:12
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	37.760	26.551	2.168	-13.449	40.000	24.383	QP
2		88.442	18.556	4.727	-24.944	43.500	13.829	QP
3		164.466	17.858	0.466	-25.642	43.500	17.392	QP
4		292.264	23.125	2.534	-22.875	46.000	20.591	QP
5		418.364	28.225	1.345	-17.775	46.000	26.881	QP
6		544.949	30.221	2.325	-15.779	46.000	27.896	QP

Profile: 2290864R	Page No.: 4
Engineer: RenZhang	
Site: AC2	Time: 2022/10/19 - 00:18
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		40.185	18.225	-0.774	-21.775	40.000	18.998	QP
2		62.252	18.654	2.566	-21.346	40.000	16.088	QP
3	*	90.868	25.655	8.317	-17.845	43.500	17.338	QP
4		202.054	24.125	0.640	-19.375	43.500	23.486	QP
5		318.332	25.145	2.231	-20.855	46.000	22.915	QP
6		430.974	27.885	2.002	-18.115	46.000	25.884	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

4.3 Emissions in non-restricted frequency band

VERDICT: PASS

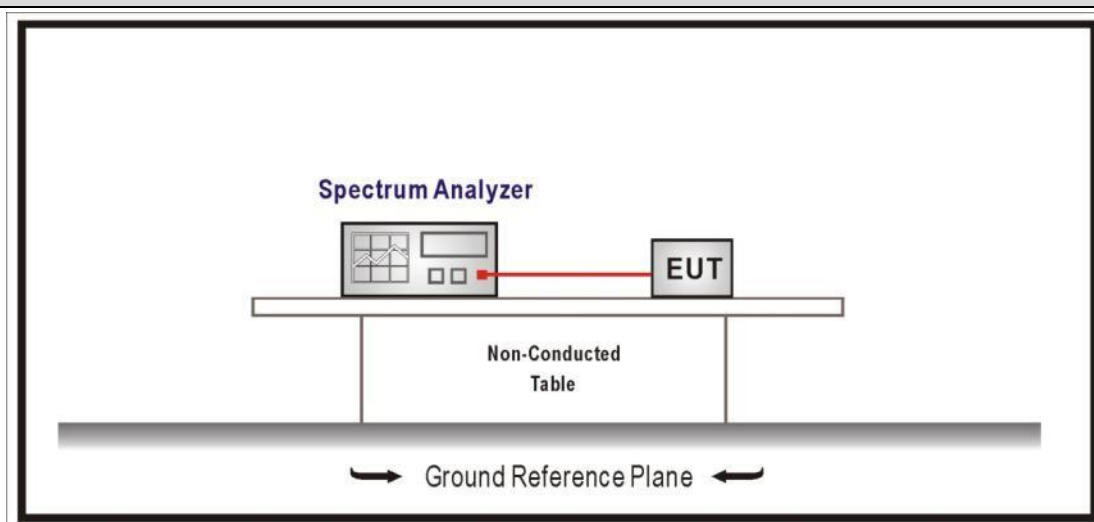
4.3.1 Limit

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).

4.3.2 Test Setup

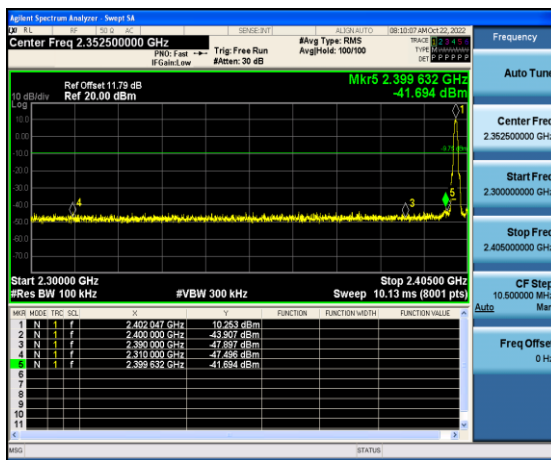


4.3.3 Test Procedure

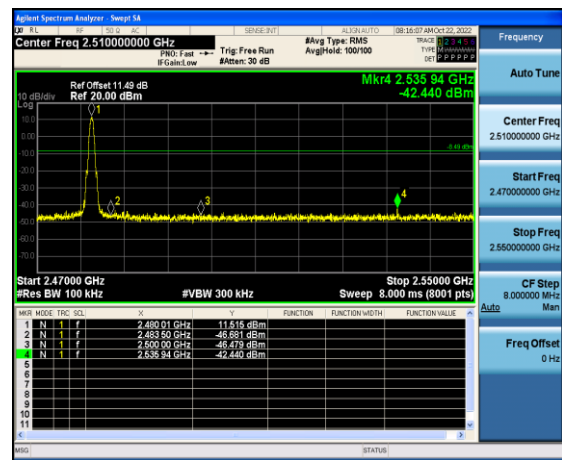
References Rule	Chapter	Description
☒ ANSI C63.10	11.11	Emissions in non-restricted frequency bands
☒ ANSI C63.10	11.11.1	General
☒ ANSI C63.10	11.11.2	Reference level measurement
☒ ANSI C63.10	11.11.3	Emission level measurement

4.3.4 Test Data

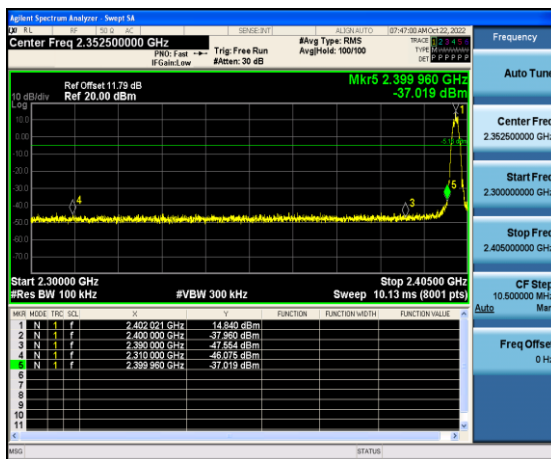
Mode 1 CH00 (2402MHz)



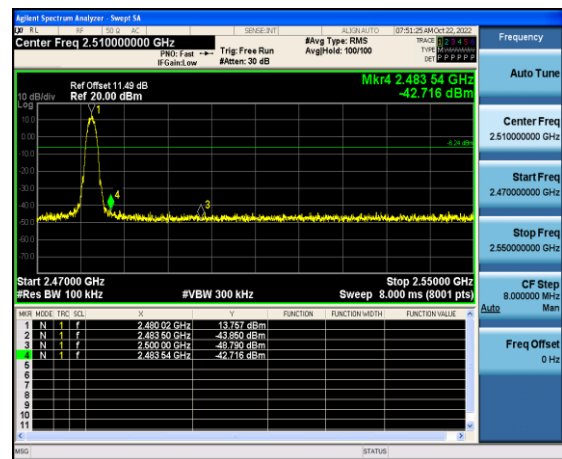
Mode 1 CH39 (2480MHz)



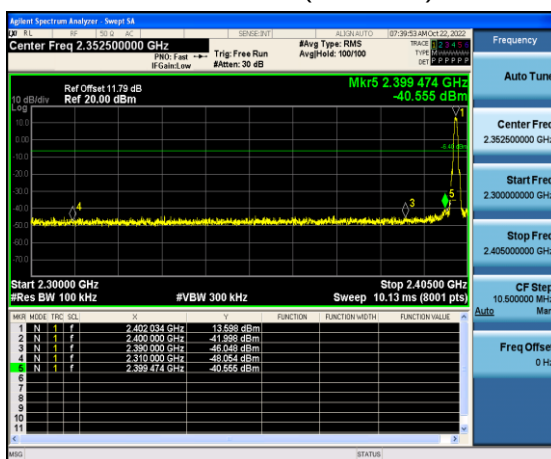
Mode 2 CH00 (2402MHz)



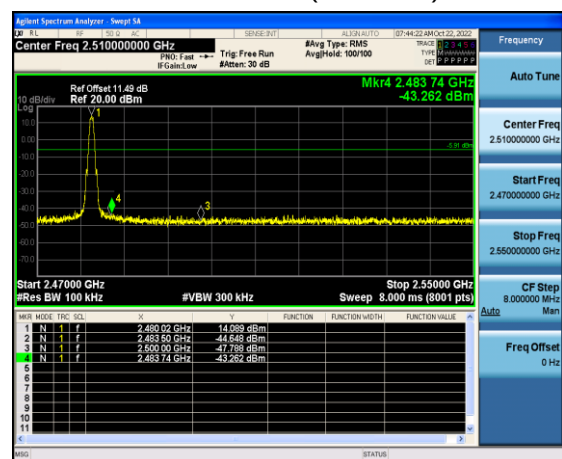
Mode 2 CH39 (2480MHz)



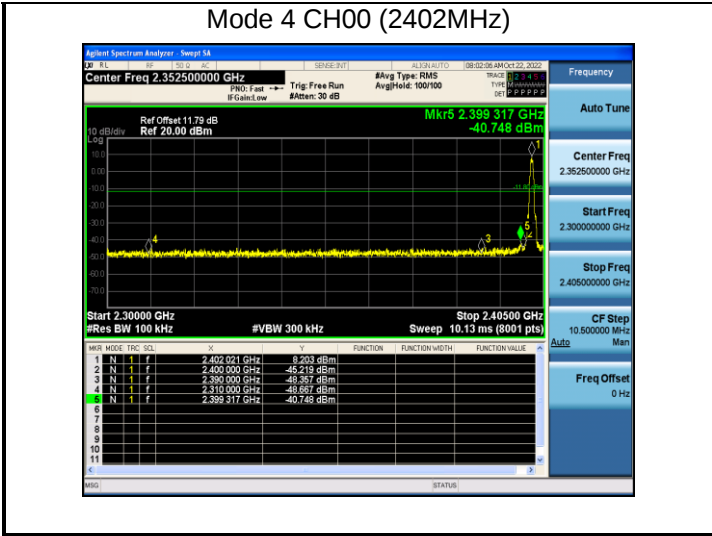
Mode 3 CH00 (2402MHz)



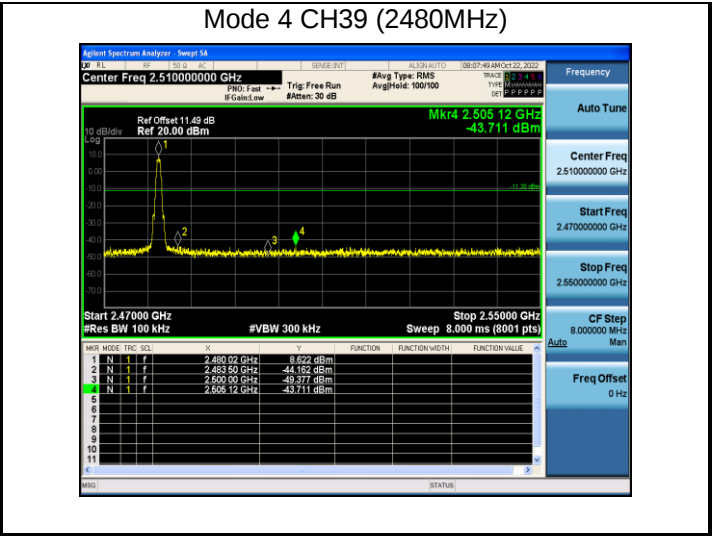
Mode 3 CH39 (2480MHz)



Mode 4 CH00 (2402MHz)

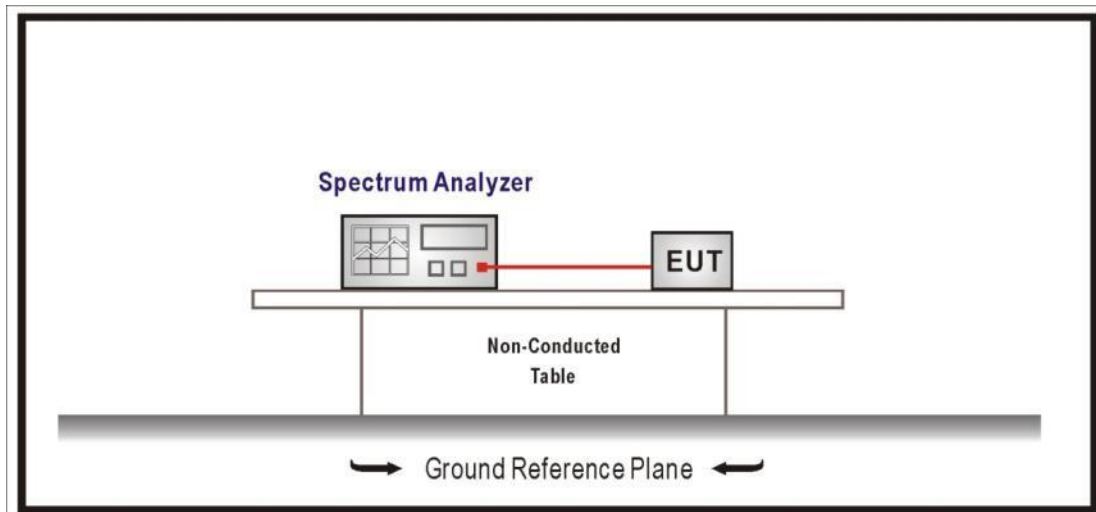


Mode 4 CH39 (2480MHz)



4.4 Duty cycle**VERDICT: PASS****4.4.1 Limit**

N/A

4.4.2 Test Setup**4.4.3 Test Procedure**

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

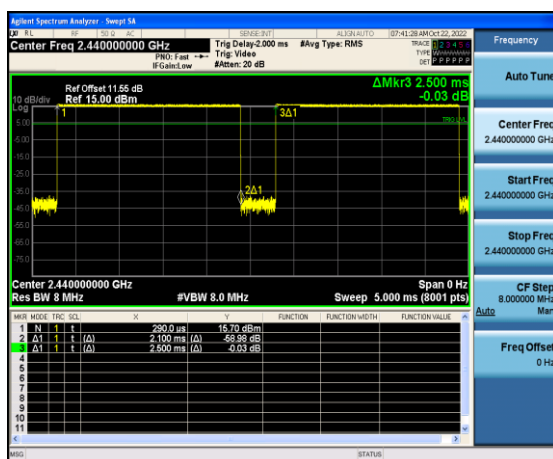
4.4.4 Test Data

Test Mode	Tx On (us)	Tx On + Tx Off (us)	VBW (kHz)	Duty Cycle (%)	Detector
Mode 1	2.10	2.50	8000	84.00	RMS
Mode 2	1.06	1.88	3000	56.38	RMS
Mode 3	4.48	5.00	3000	89.60	RMS
Mode 4	11.20	11.20	3000	100.00	RMS

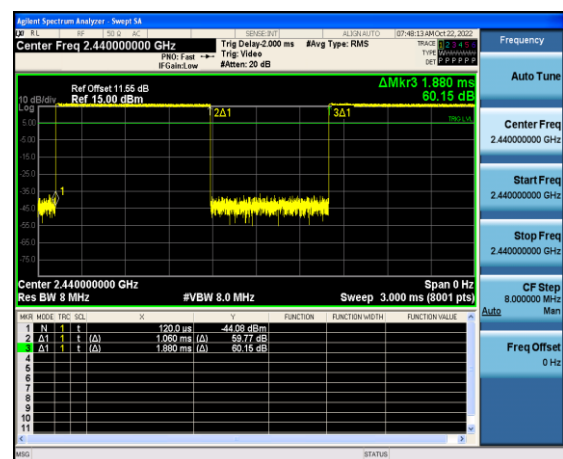
Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Note 2: According to C63.10, if continuous transmission of the EUT ($D \geq 98\%$) cannot be achieved and the duty cycle is constant (duty cycle variations are less than $\pm 2\%$), for Radiated Emission Band Edge and Radiated Emission, for average detector set: $VBW \geq 3RBW$ will be used; If continuous transmission of the EUT ($D \geq 98\%$) cannot be achieved and the duty cycle is not constant (duty cycle variations exceed $\pm 2\%$), when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: $VBW \geq 1/T$ will be used.

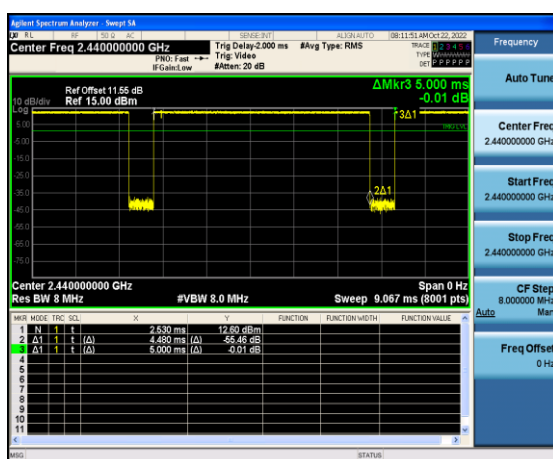
Mode 1 CH19 2440MHz



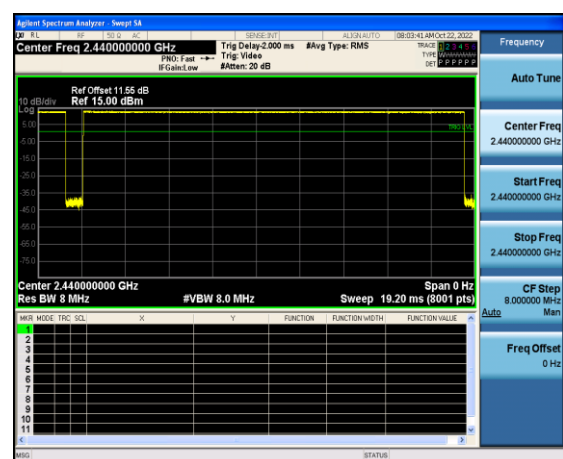
Mode 2 CH19 2440MHz



Mode 3 CH19 2440MHz



Mode 4 CH19 2440MHz



4.5 Band Edge

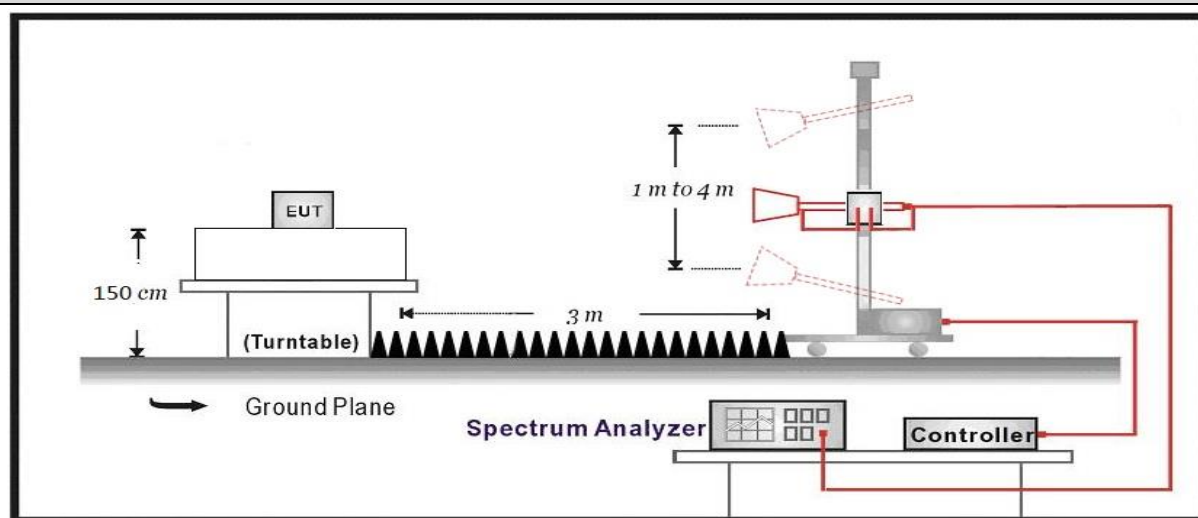
VERDICT: PASS

4.5.1 Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247(d) ,15.209		
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

4.5.2 Test Setup

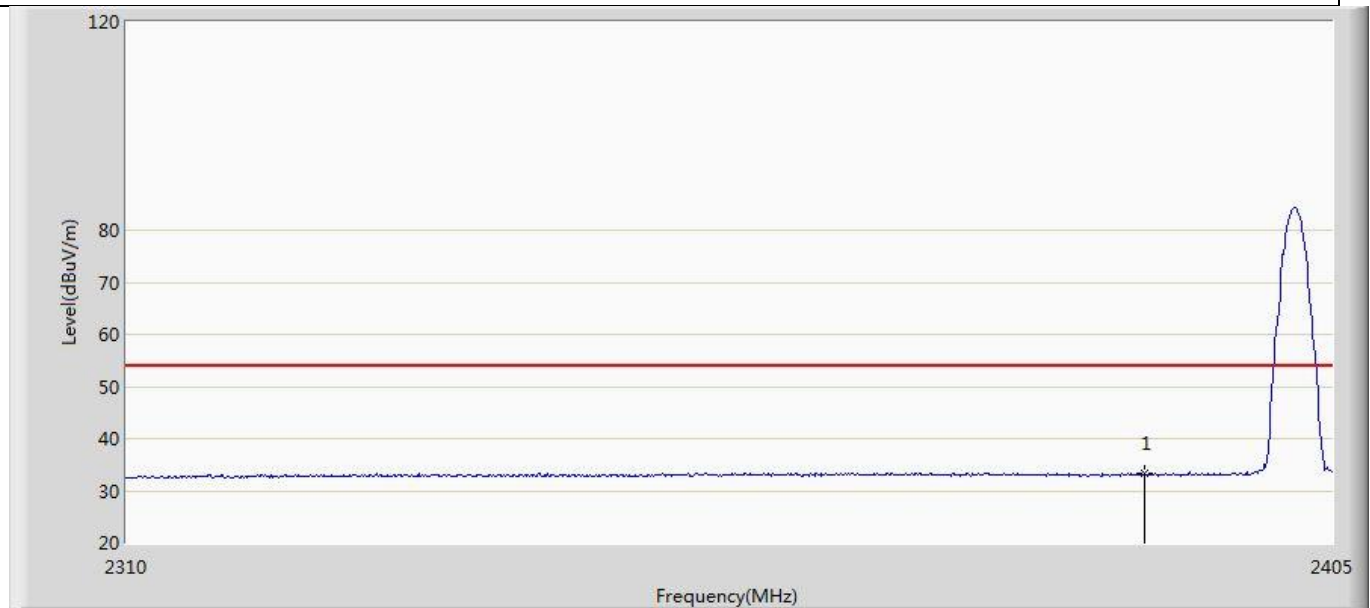


4.5.3 Test Procedure

	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	11.12.2	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

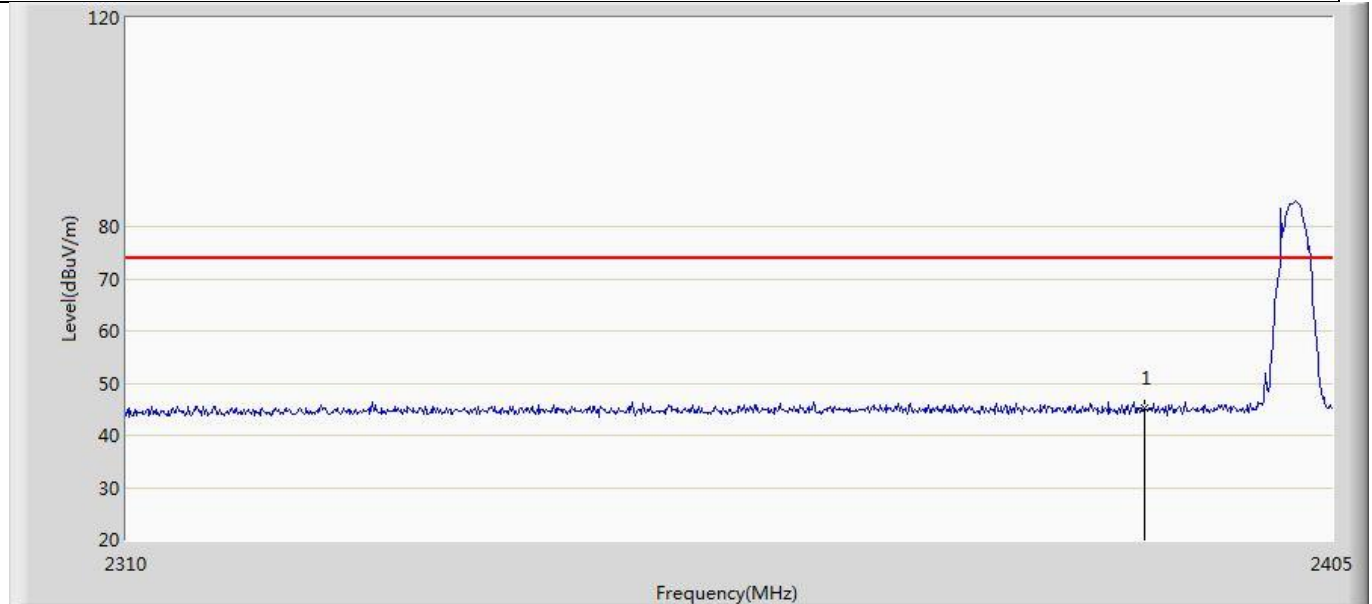
4.5.4 Test Data

Profile: 2290864R	Page No.: 1
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



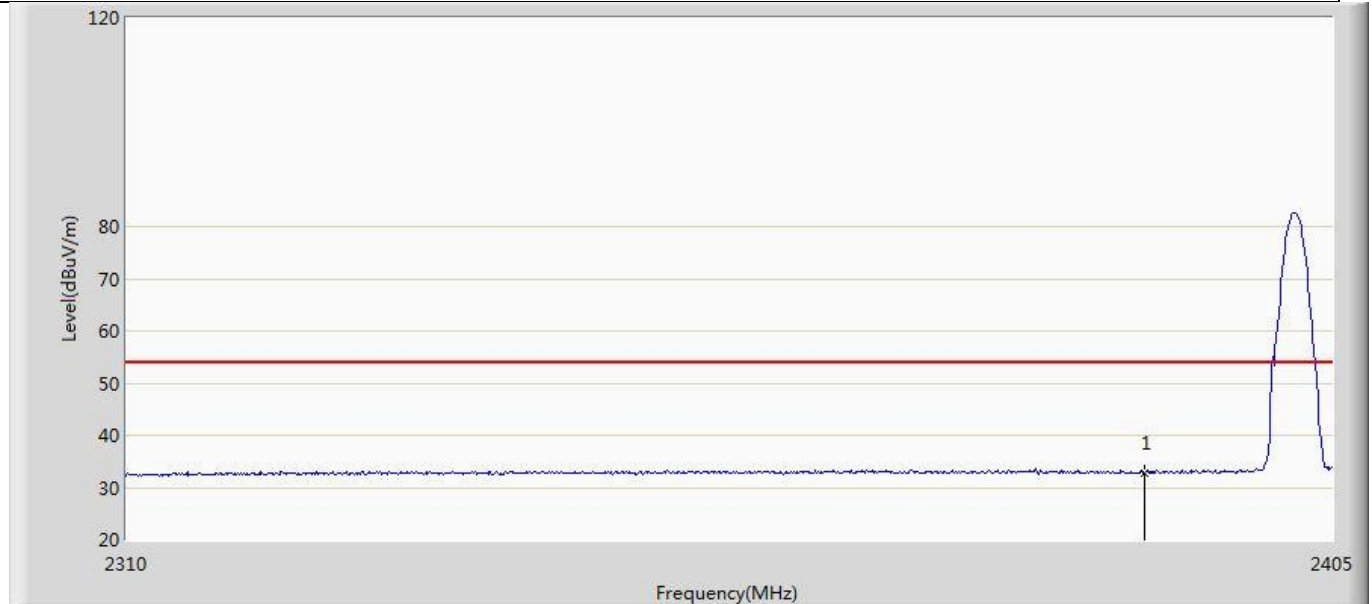
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.202	-0.803	-20.798	54.000	34.005	AV

Profile: 2290864R	Page No.: 2
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



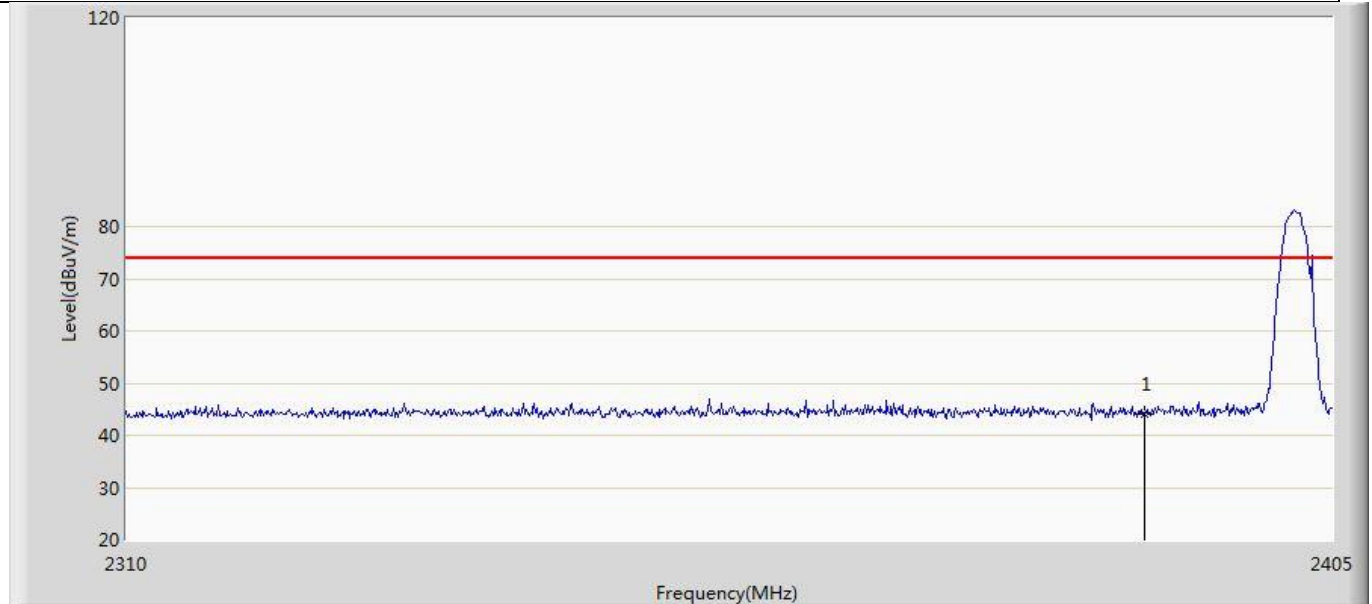
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.182	11.177	-28.818	74.000	34.005	PK

Profile: 2290864R	Page No.: 3
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



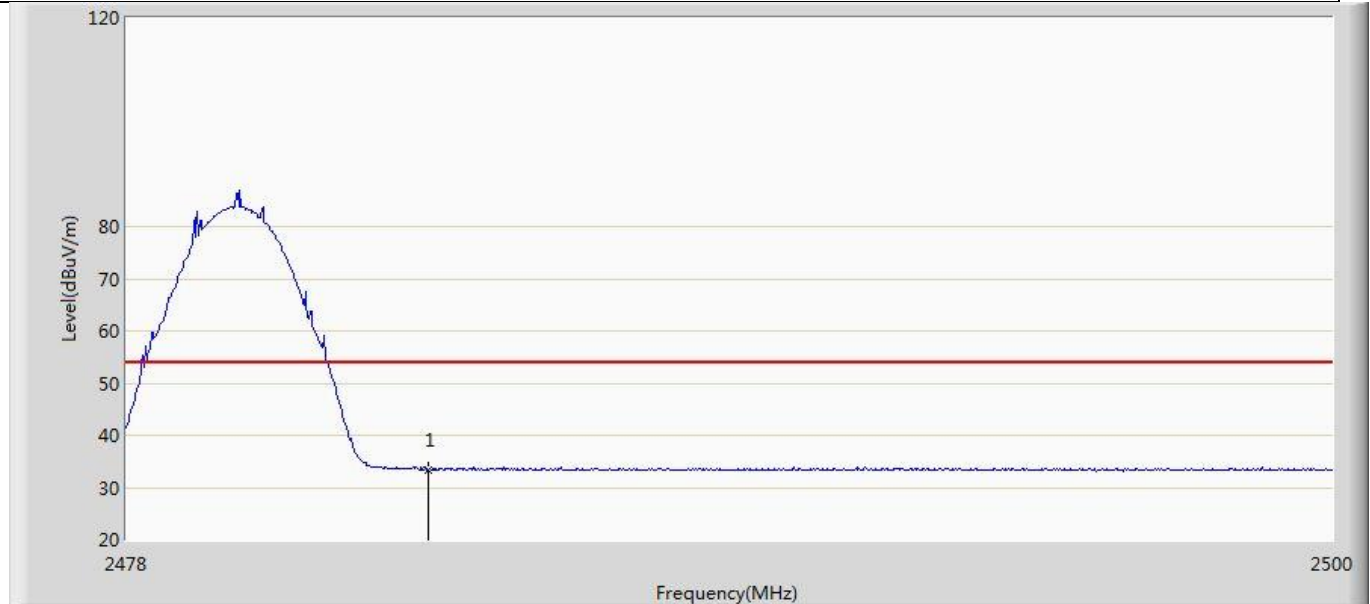
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	32.837	-1.168	-21.163	54.000	34.005	AV

Profile: 2290864R	Page No.: 4
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



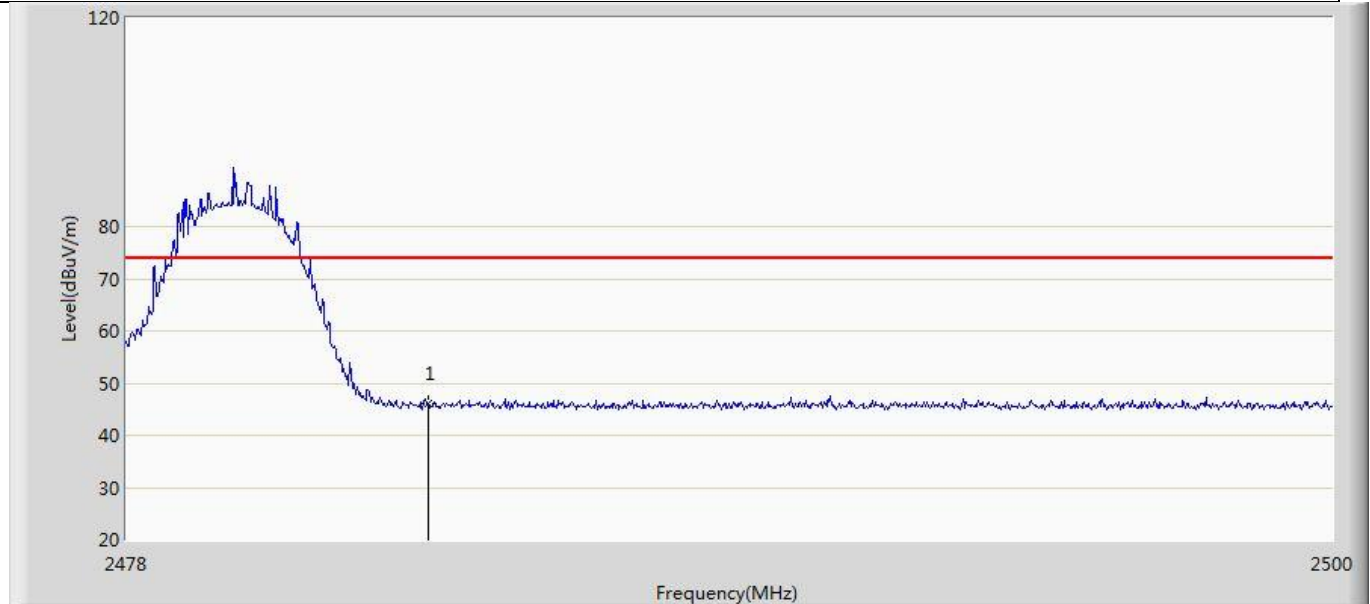
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.001	9.996	-29.999	74.000	34.005	PK

Profile: 2290864R	Page No.: 5
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:43
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



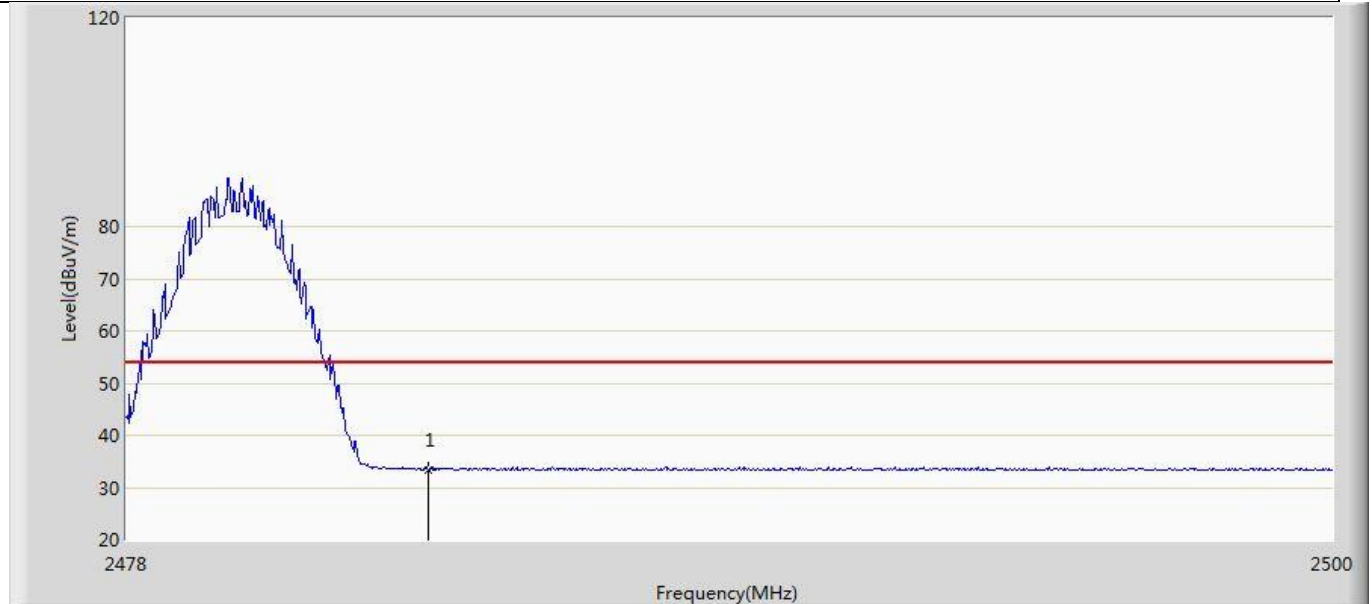
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.459	-0.762	-20.541	54.000	34.221	AV

Profile: 2290864R	Page No.: 6
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



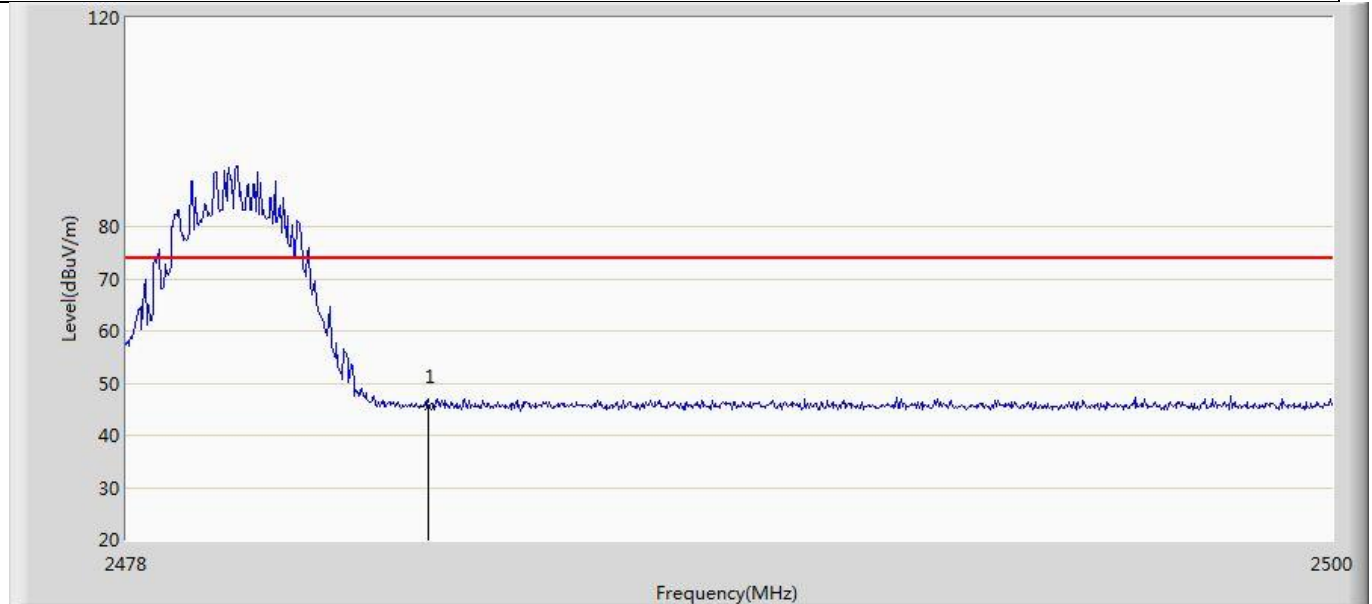
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	46.000	11.779	-28.000	74.000	34.221	PK

Profile: 2290864R	Page No.: 7
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



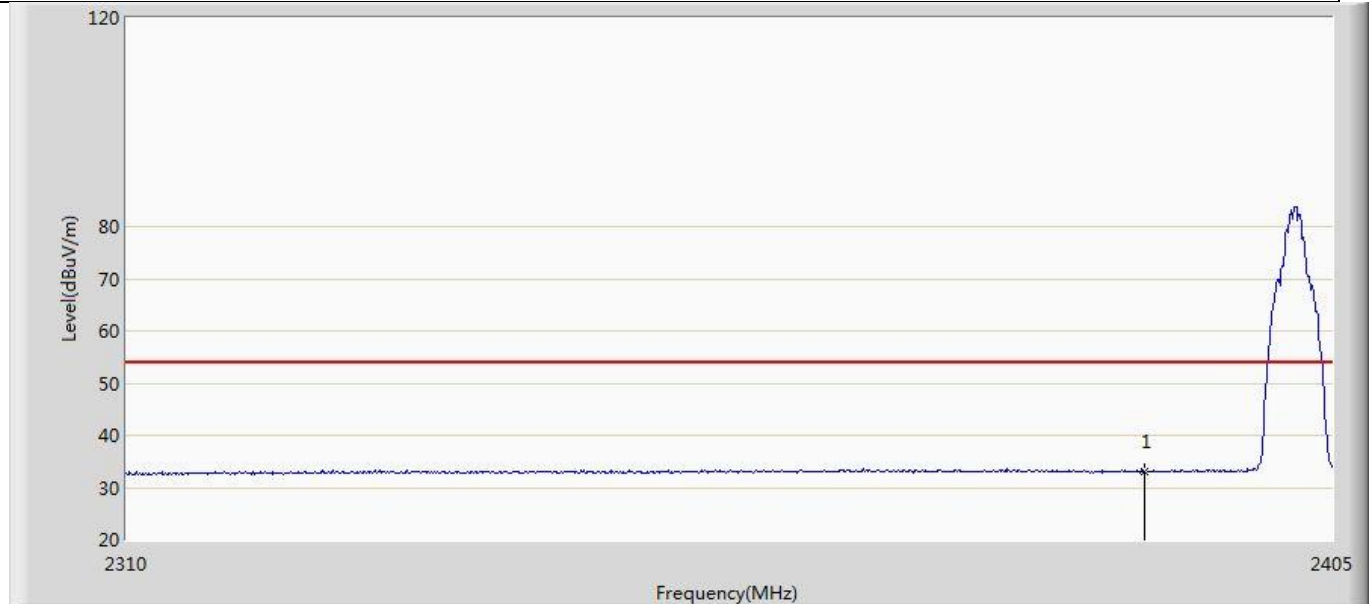
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.423	-0.798	-20.577	54.000	34.221	AV

Profile: 2290864R	Page No.: 8
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



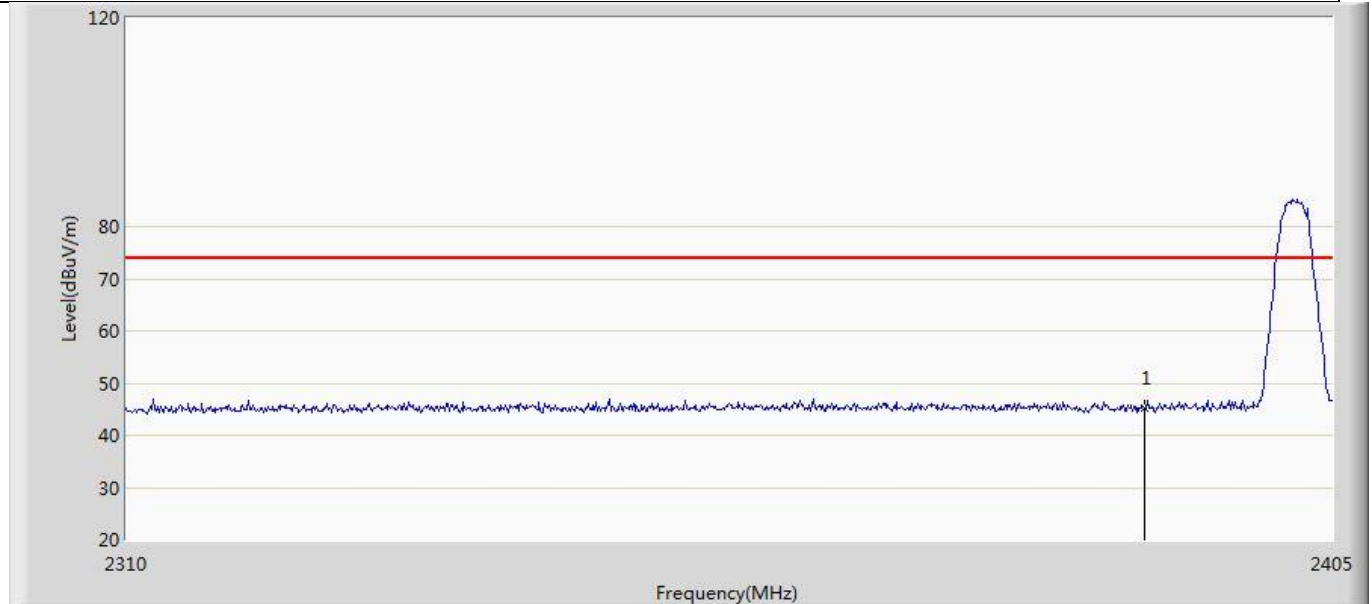
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.540	11.319	-28.460	74.000	34.221	PK

Profile: 2290864R	Page No.: 9
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



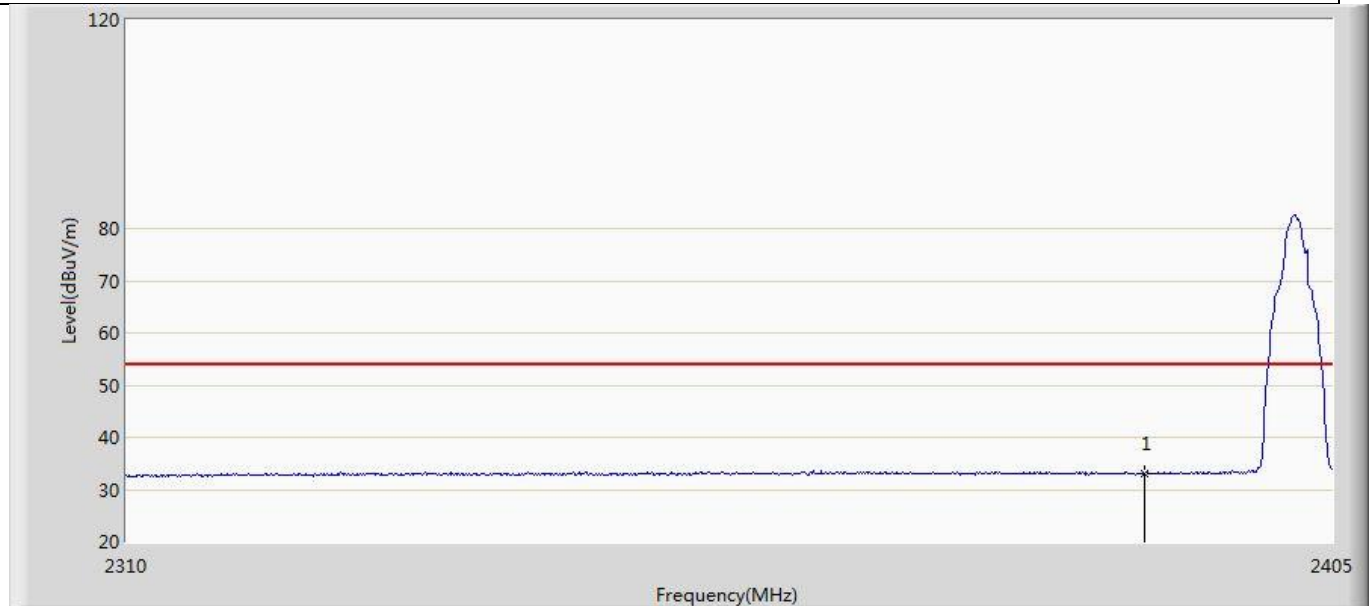
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.159	-0.846	-20.841	54.000	34.005	AV

Profile: 2290864R	Page No.: 10
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



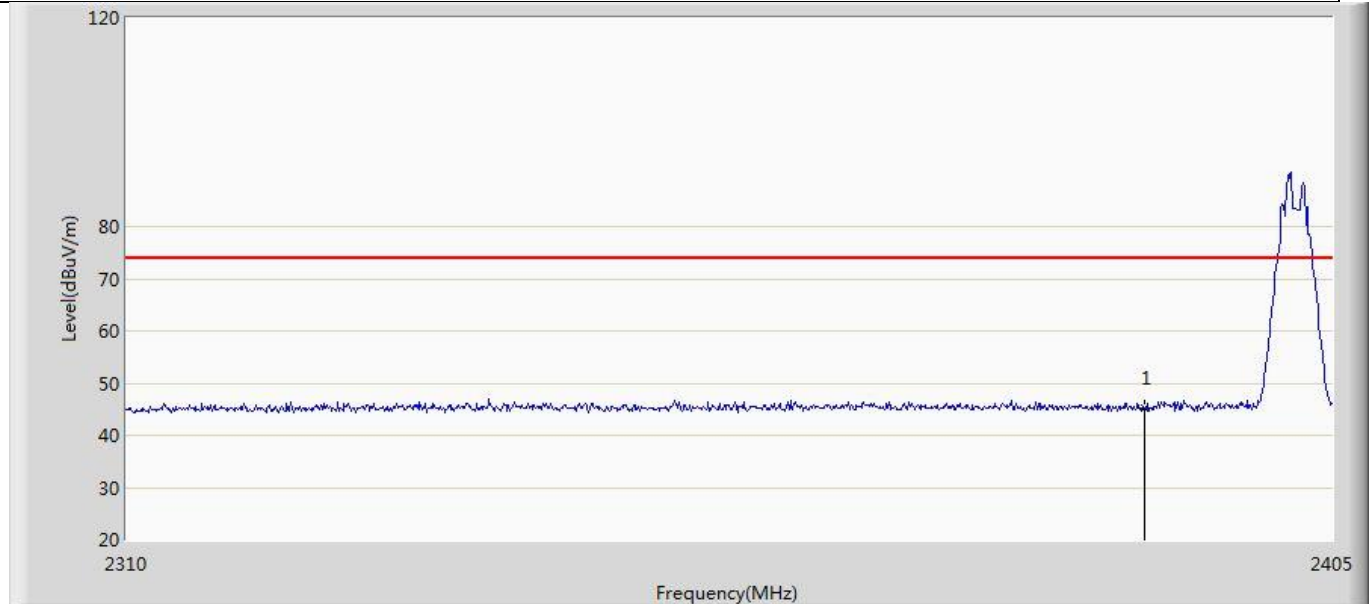
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.315	11.310	-28.685	74.000	34.005	PK

Profile: 2290864R	Page No.: 11
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



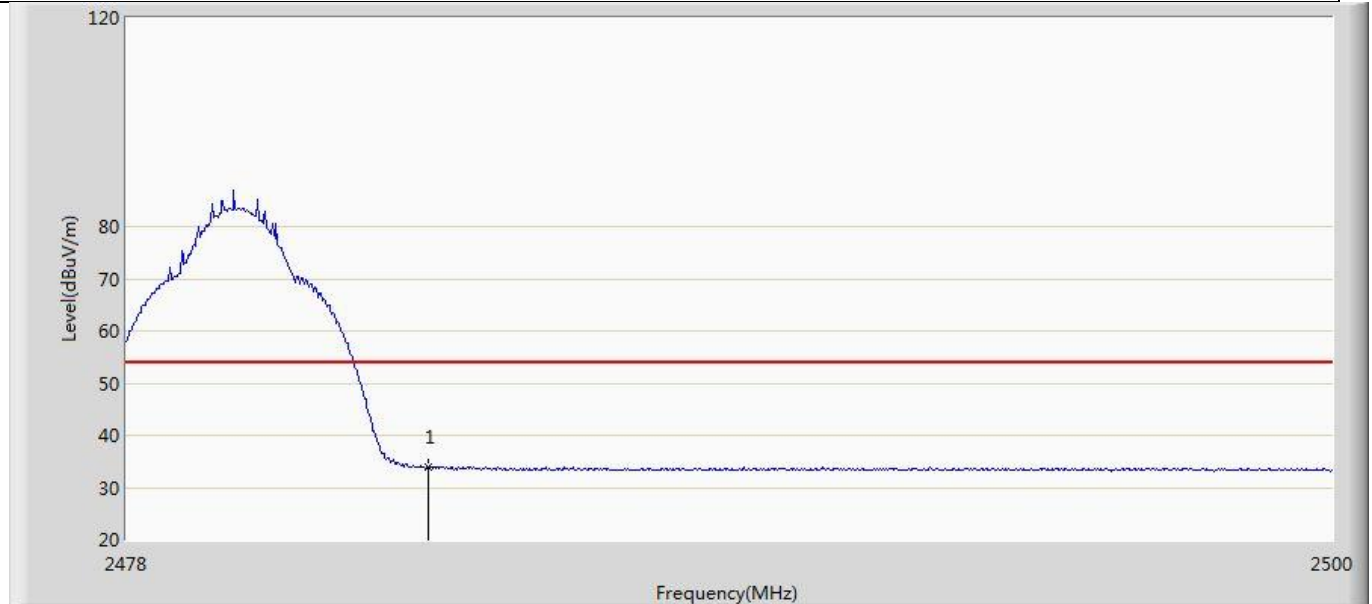
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.023	-0.982	-20.977	54.000	34.005	AV

Profile: 2290864R	Page No.: 12
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



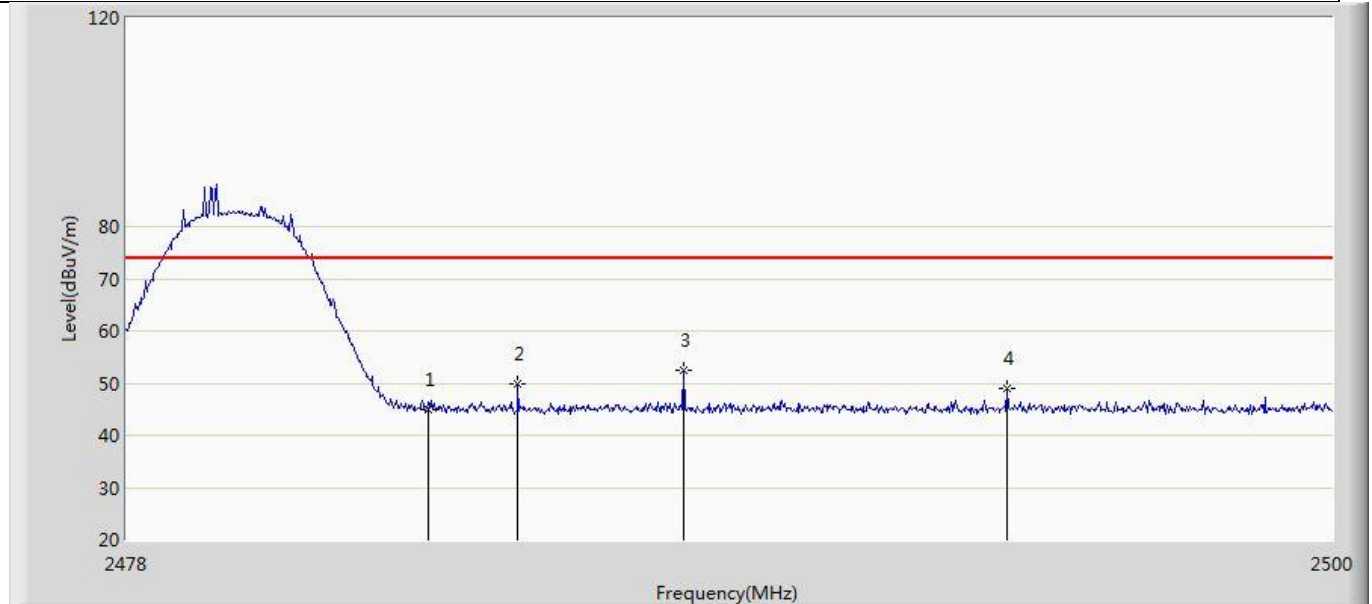
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.259	11.254	-28.741	74.000	34.005	PK

Profile: 2290864R	Page No.: 13
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



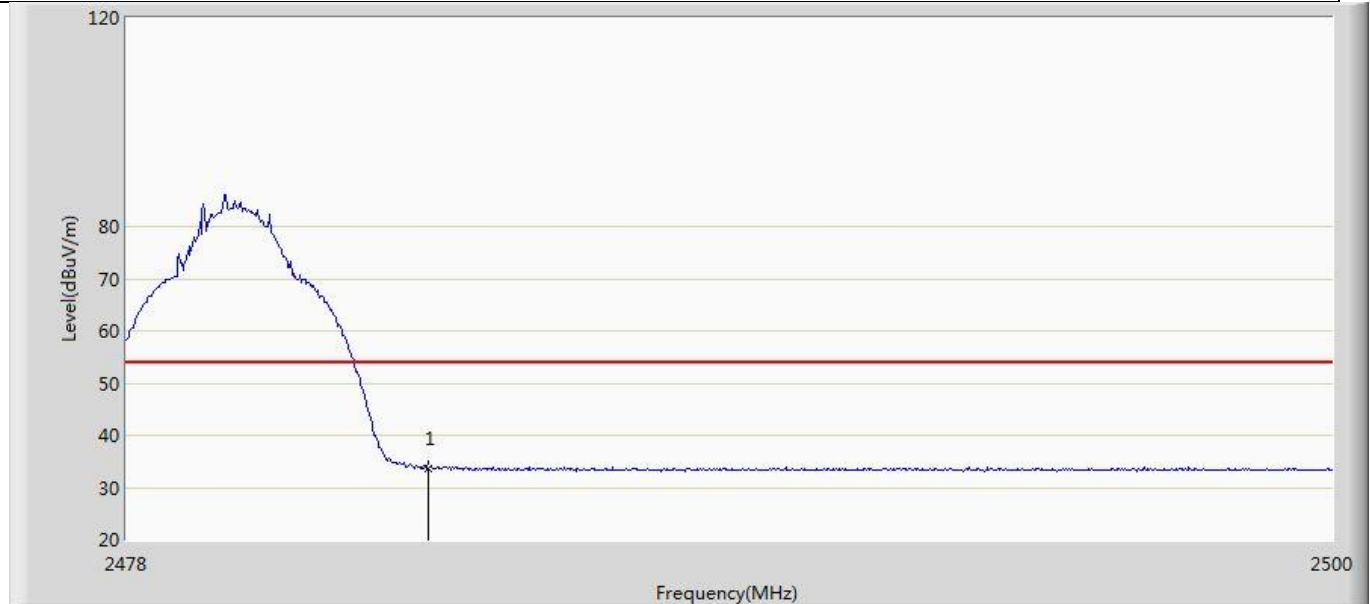
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.774	-0.447	-20.226	54.000	34.221	AV

Profile: 2290864R	Page No.: 14
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



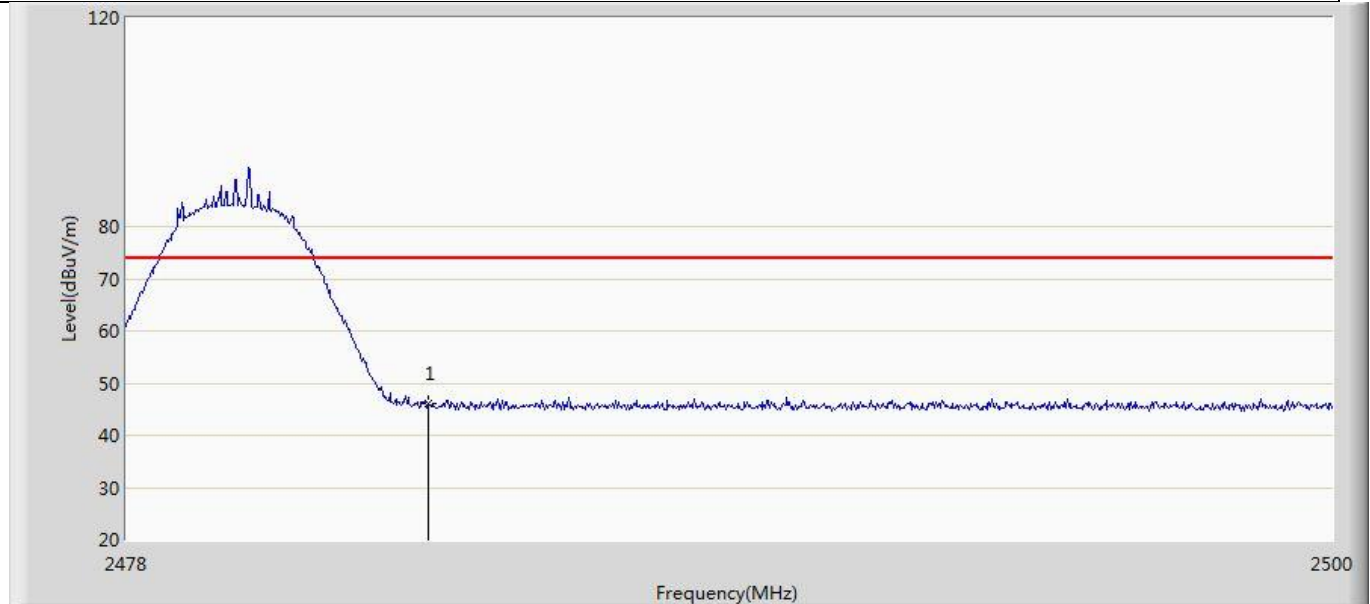
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2483.500	45.017	10.796	-28.983	74.000	34.221	PK
2		2485.128	49.825	15.601	-24.175	74.000	34.224	PK
3	*	2488.142	52.531	18.299	-21.469	74.000	34.232	PK
4		2494.060	48.855	14.610	-25.145	74.000	34.245	PK

Profile: 2290864R	Page No.: 15
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



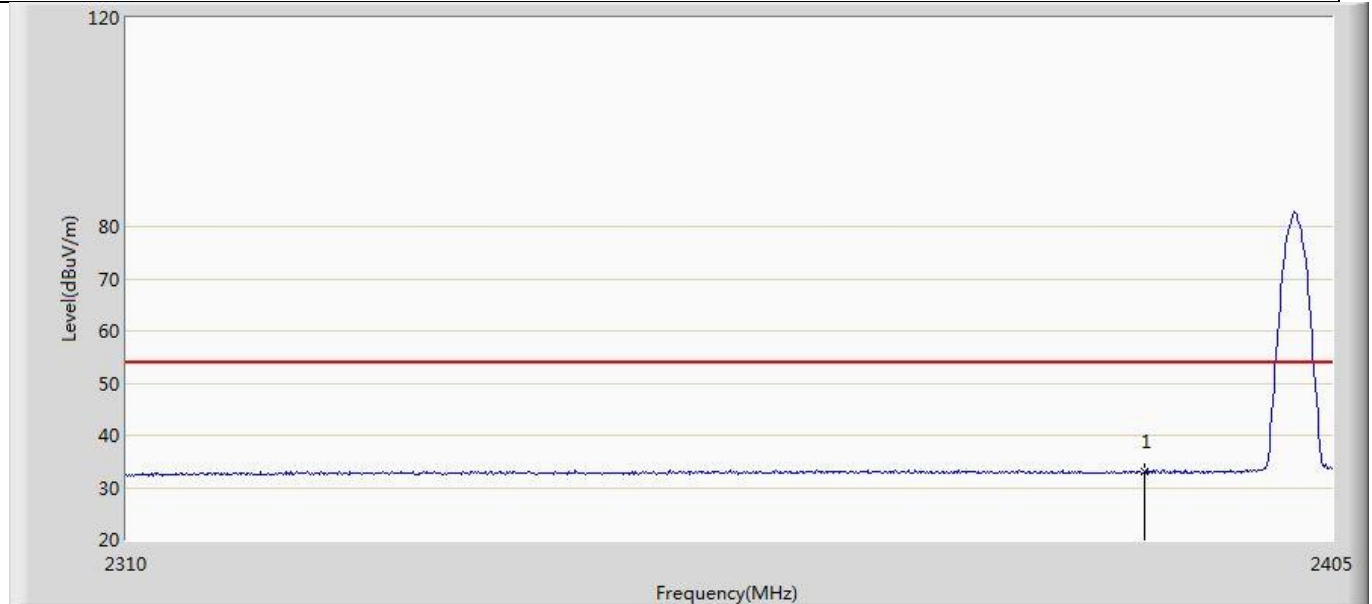
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.721	-0.500	-20.279	54.000	34.221	AV

Profile: 2290864R	Page No.: 16
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



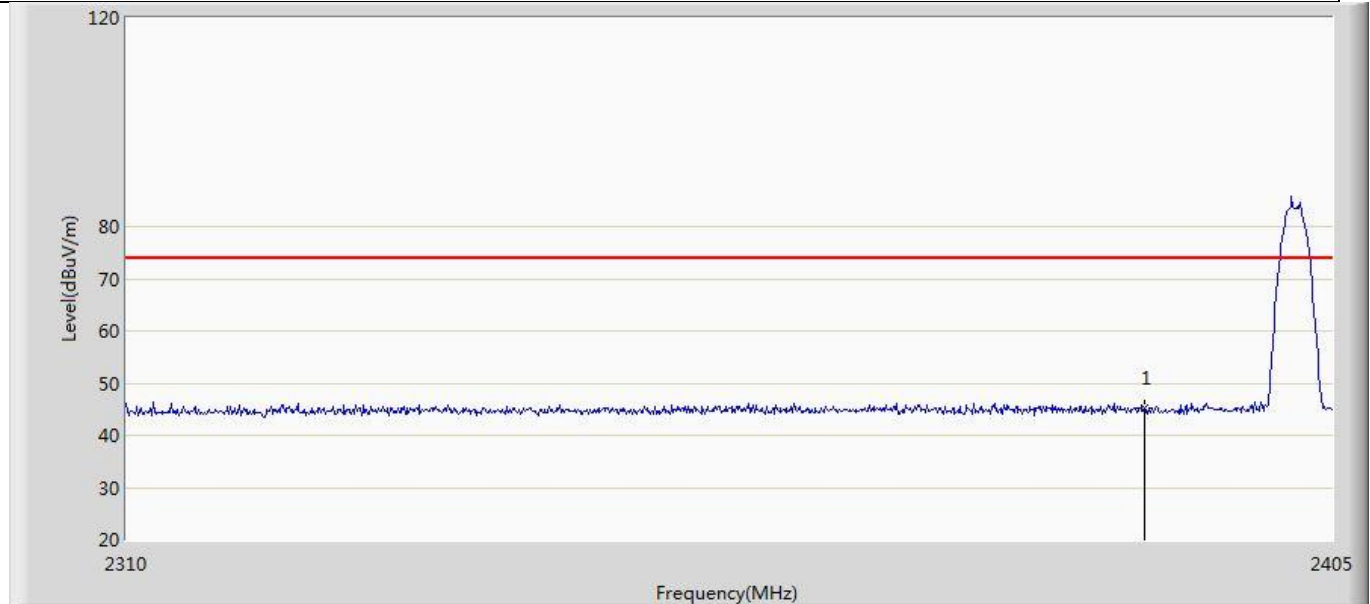
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	46.035	11.814	-27.965	74.000	34.221	PK

Profile: 2290864R	Page No.: 17
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



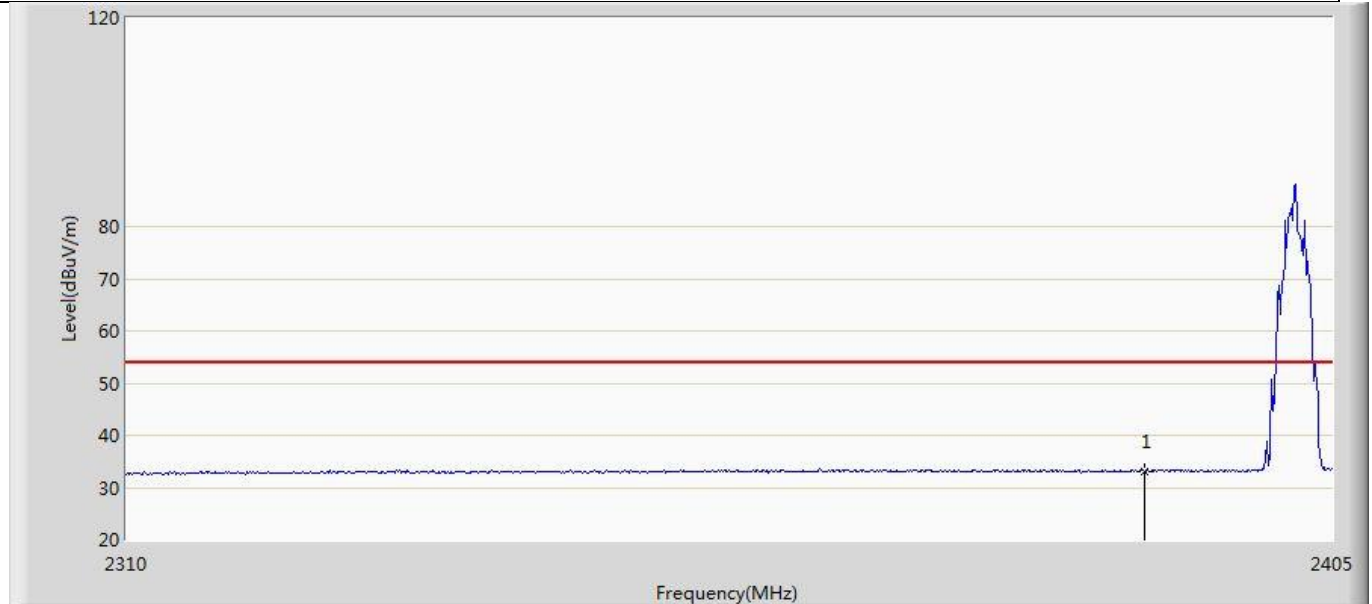
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	32.916	-1.089	-21.084	54.000	34.005	AV

Profile: 2290864R	Page No.: 18
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



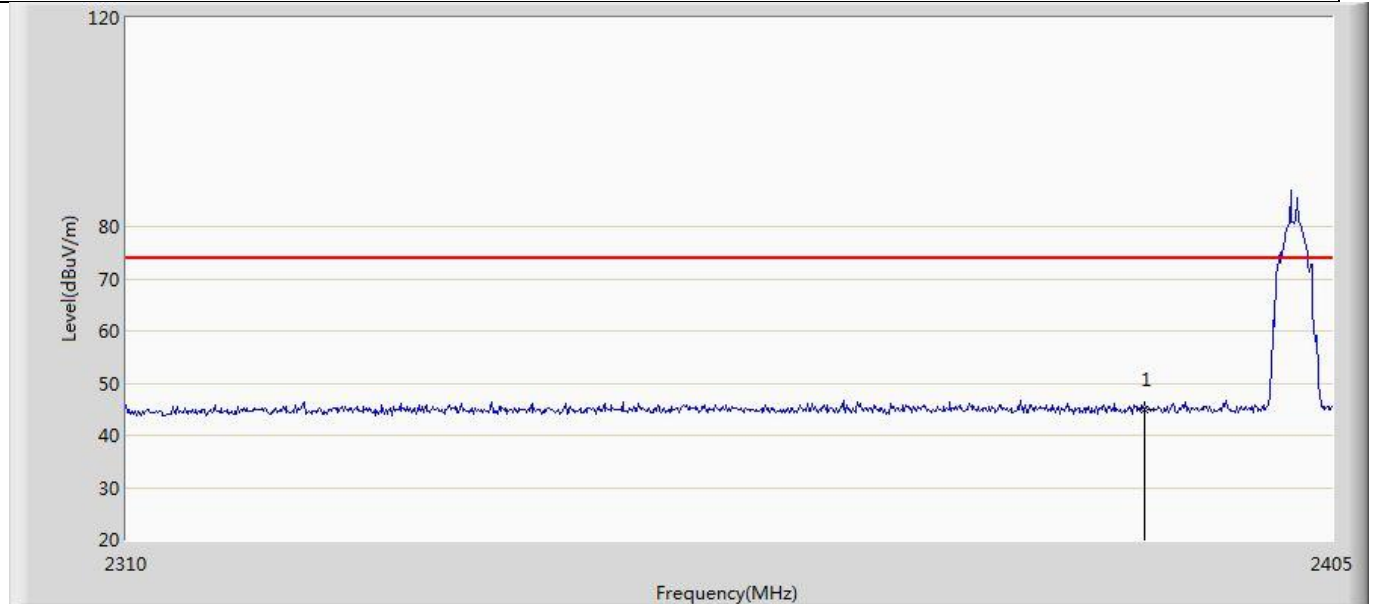
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.274	11.269	-28.726	74.000	34.005	PK

Profile: 2290864R	Page No.: 19
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



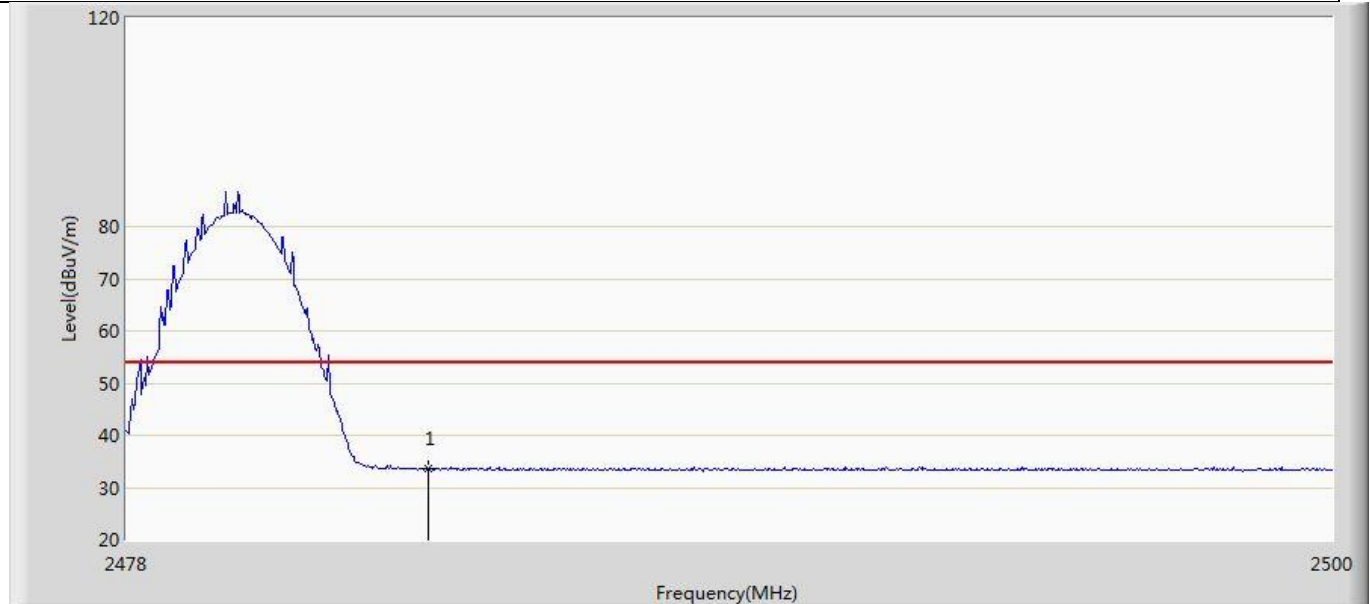
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.042	-0.963	-20.958	54.000	34.005	AV

Profile: 2290864R	Page No.: 20
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



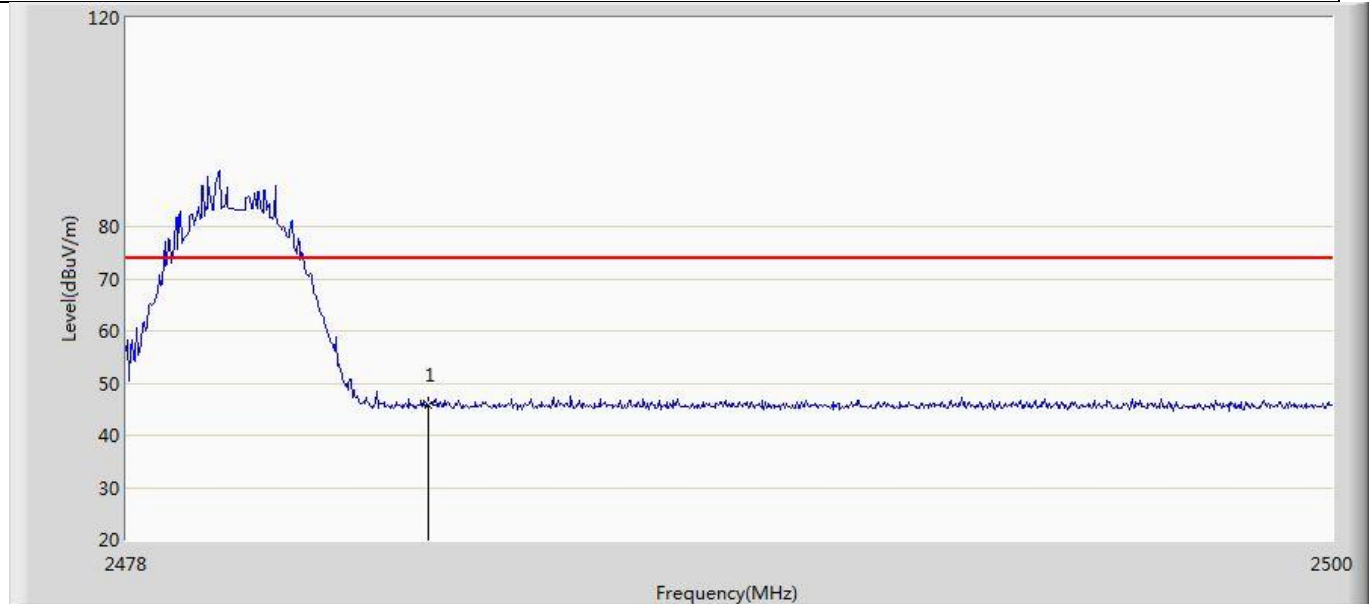
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.016	11.011	-28.984	74.000	34.005	PK

Profile: 2290864R	Page No.: 21
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



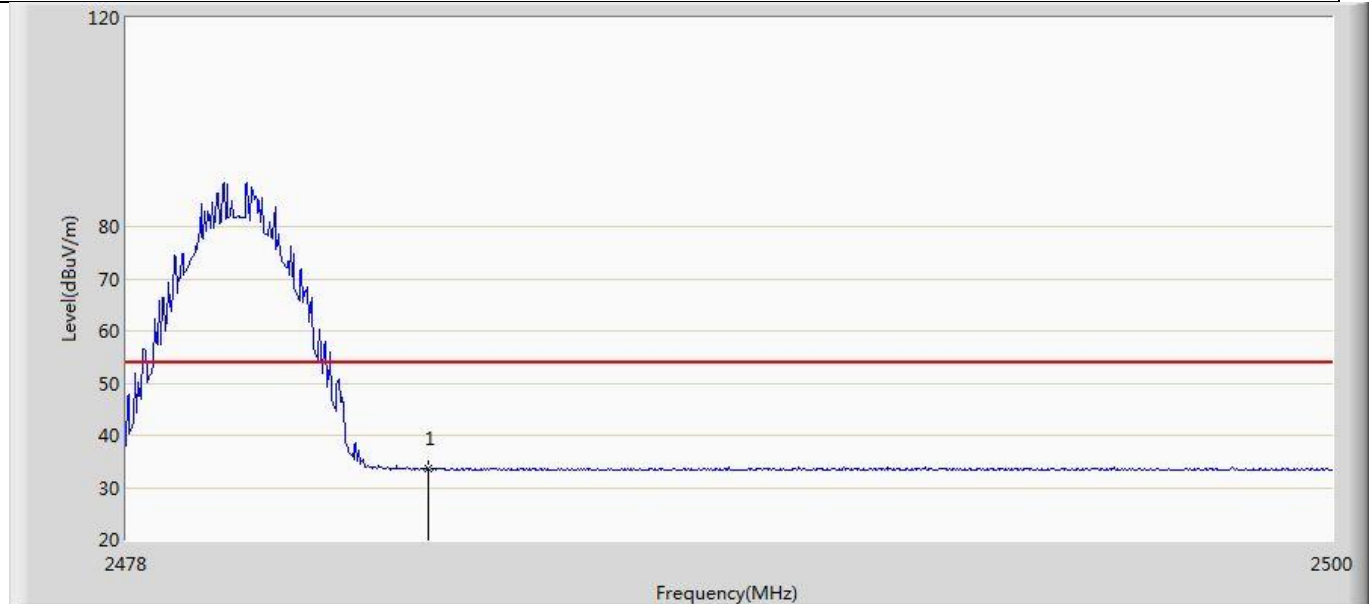
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.638	-0.583	-20.362	54.000	34.221	AV

Profile: 2290864R	Page No.: 22
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



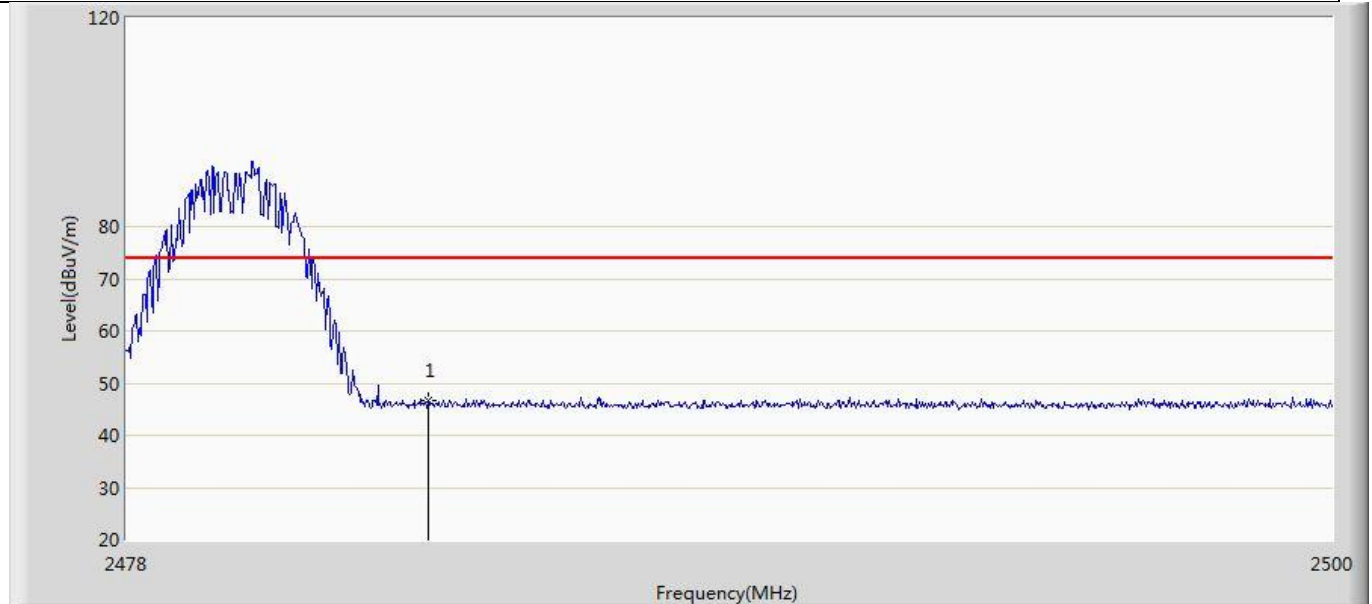
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.931	11.710	-28.069	74.000	34.221	PK

Profile: 2290864R	Page No.: 23
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:10
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



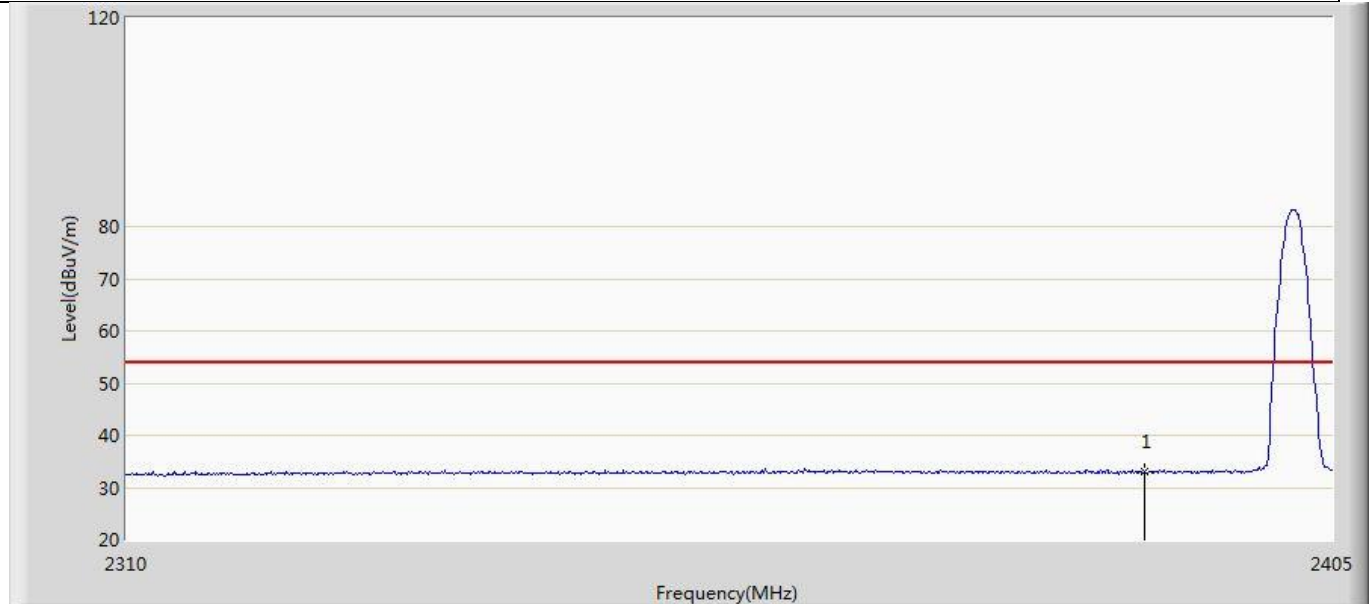
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.700	-0.521	-20.300	54.000	34.221	AV

Profile: 2290864R	Page No.: 24
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



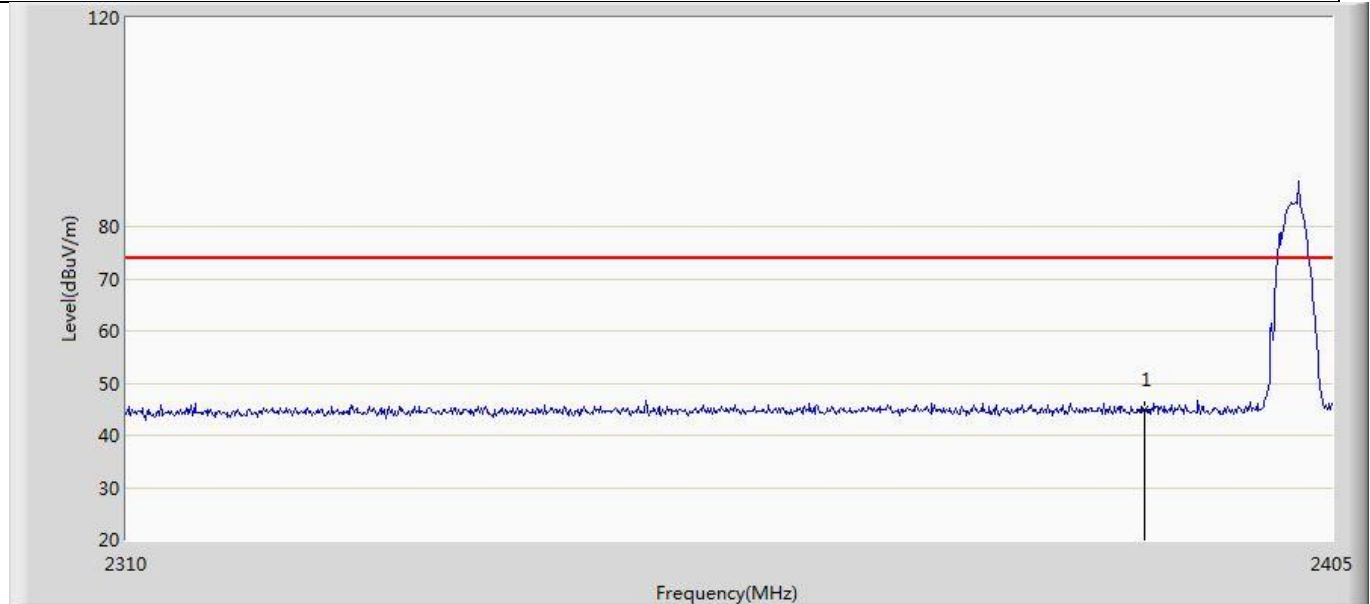
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	46.666	12.445	-27.334	74.000	34.221	PK

Profile: 2290864R	Page No.: 25
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:13
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



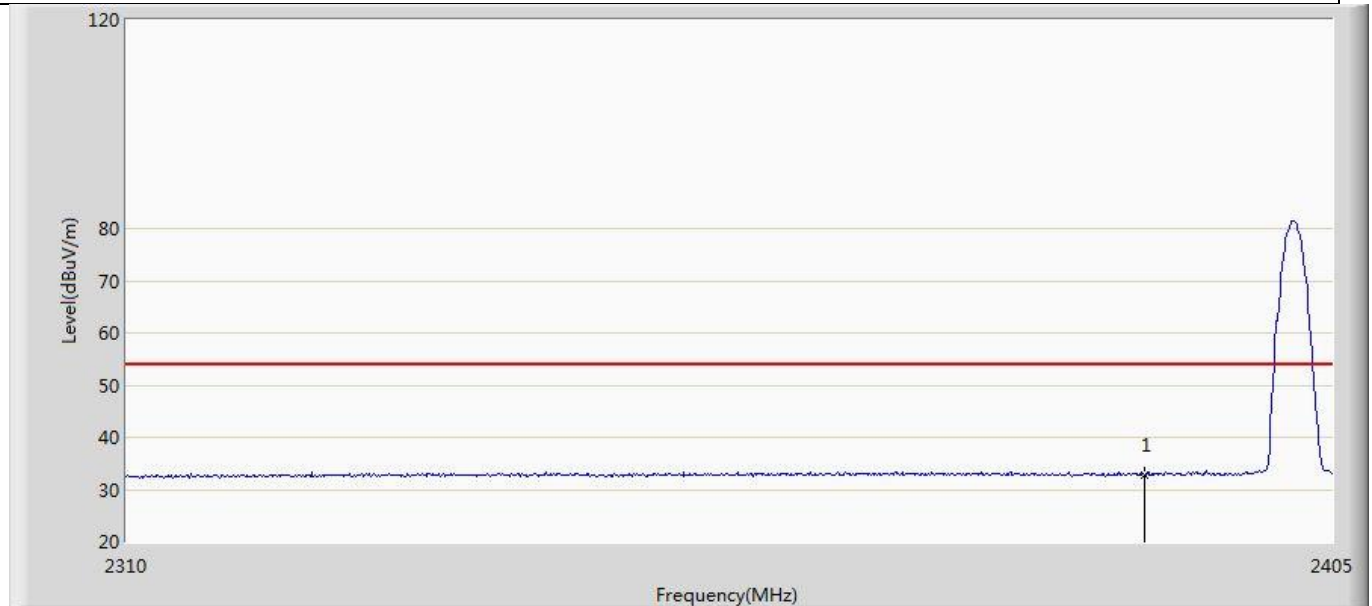
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	32.940	-1.065	-21.060	54.000	34.005	AV

Profile: 2290864R	Page No.: 26
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



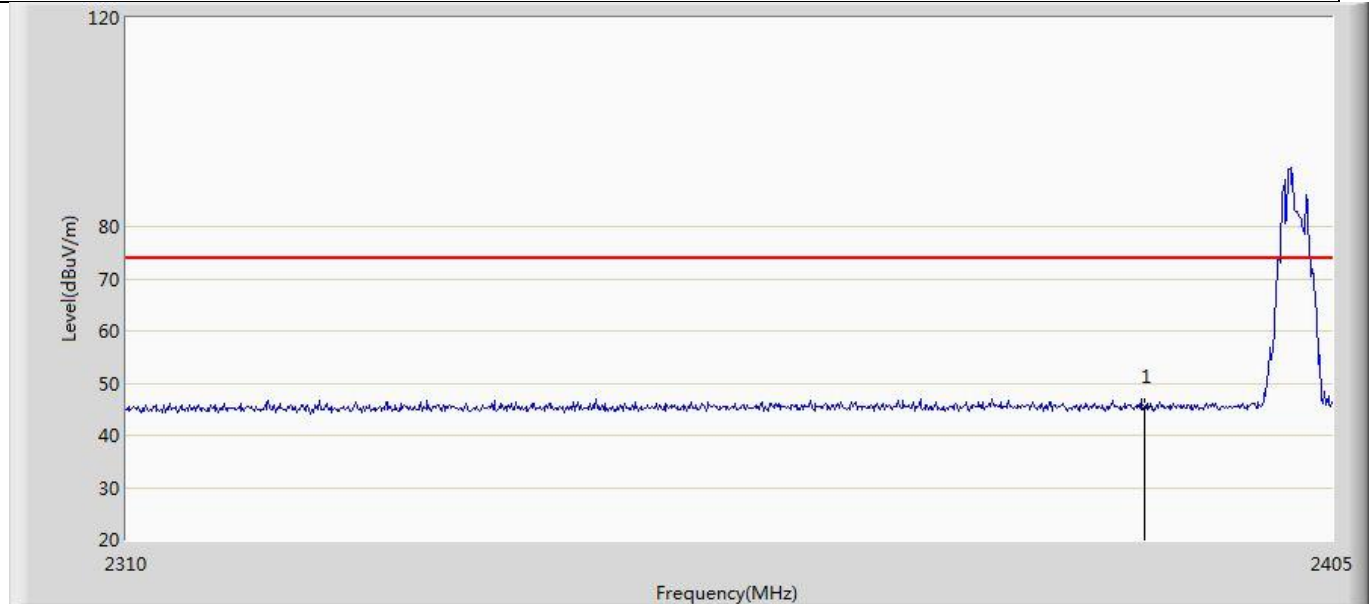
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.007	11.002	-28.993	74.000	34.005	PK

Profile: 2290864R	Page No.: 27
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



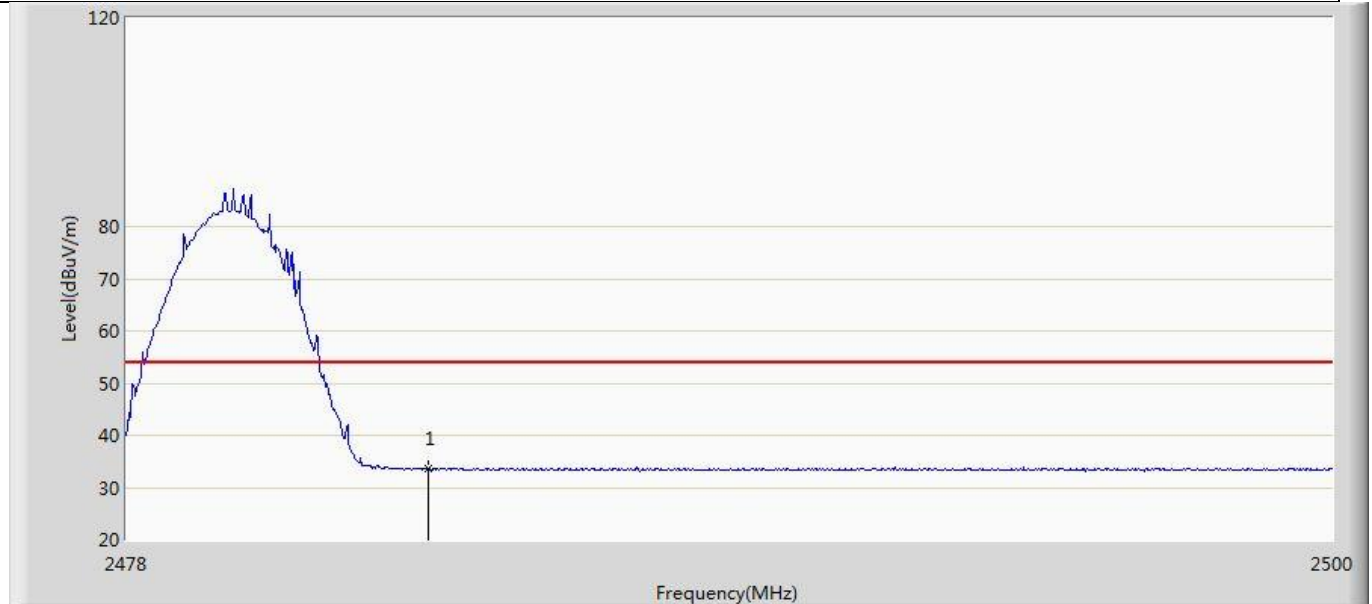
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	32.800	-1.205	-21.200	54.000	34.005	AV

Profile: 2290864R	Page No.: 28
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



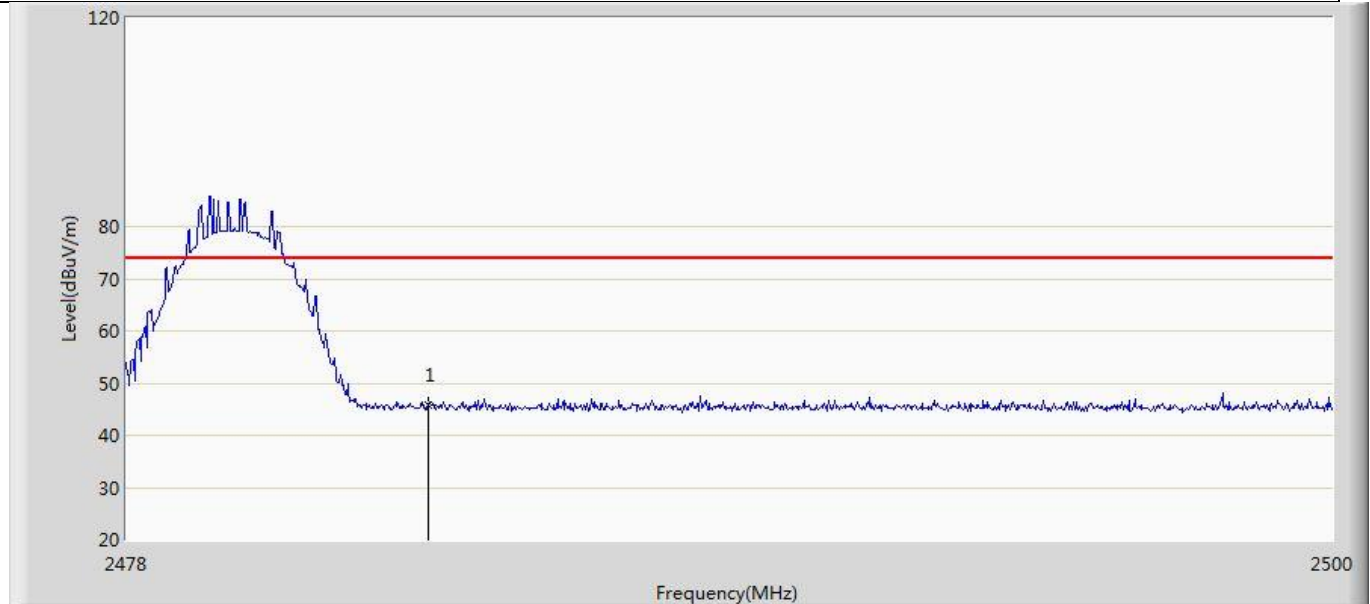
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.458	11.453	-28.542	74.000	34.005	PK

Profile: 2290864R	Page No.: 29
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



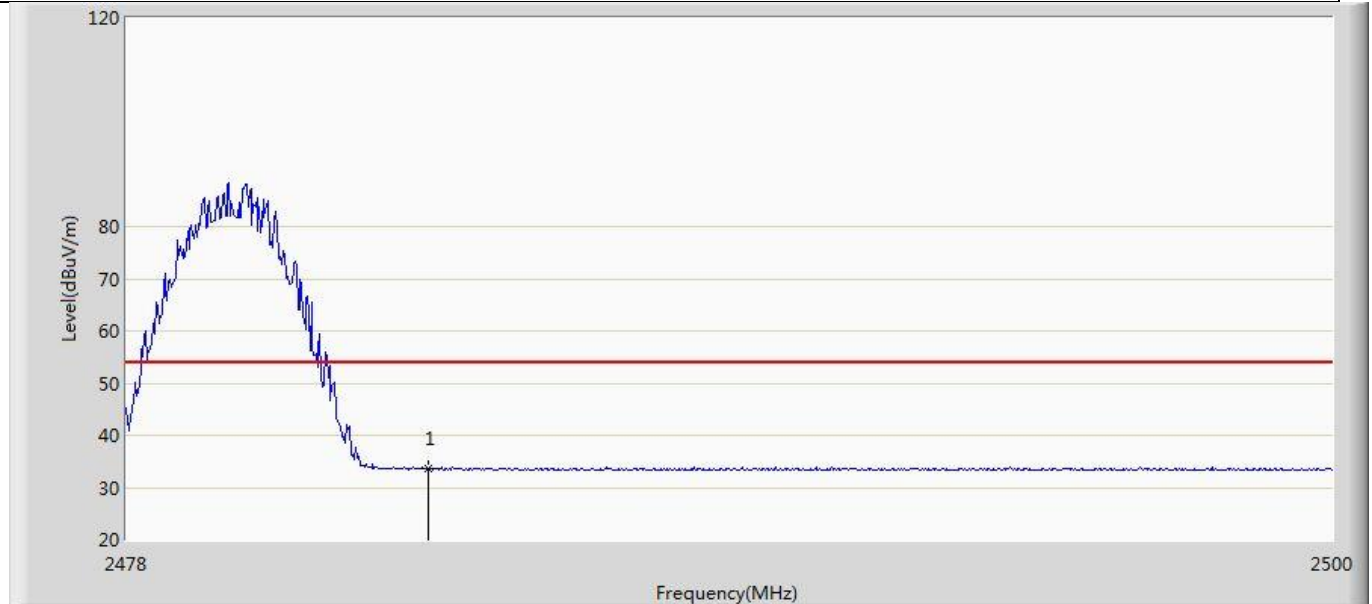
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.572	-0.649	-20.428	54.000	34.221	AV

Profile: 2290864R	Page No.: 30
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



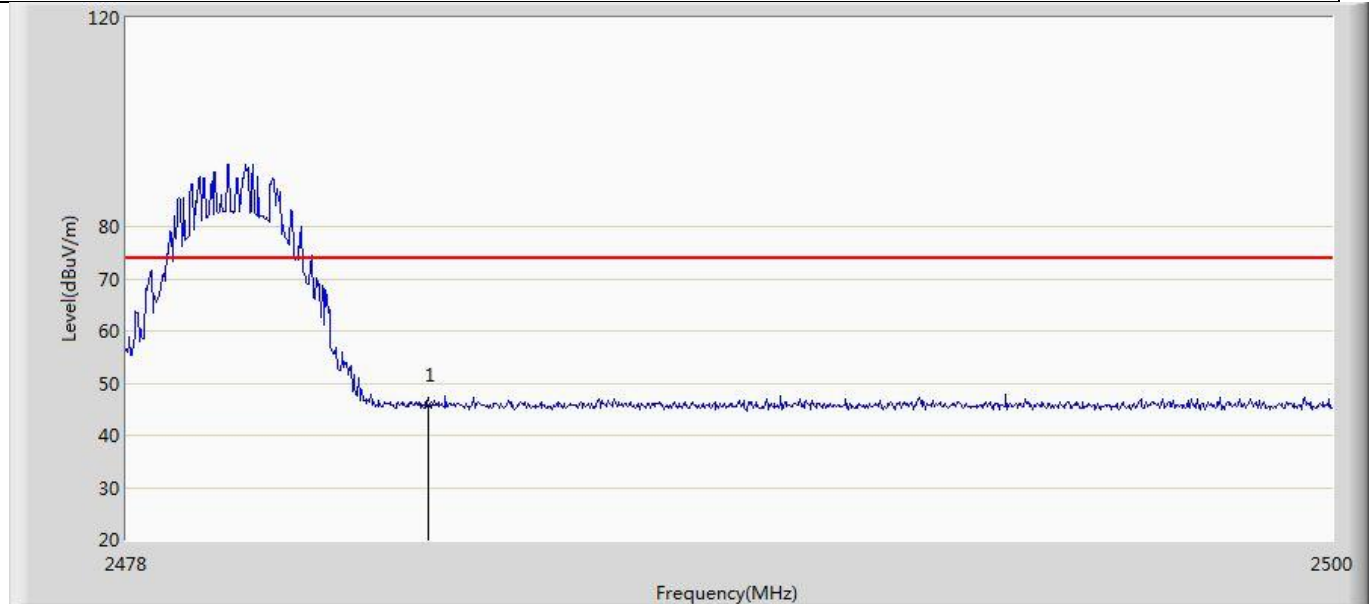
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.697	11.476	-28.303	74.000	34.221	PK

Profile: 2290864R	Page No.: 31
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.660	-0.561	-20.340	54.000	34.221	AV

Profile: 2290864R	Page No.: 32
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 00:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence receiver	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	45.729	11.508	-28.271	74.000	34.221	PK

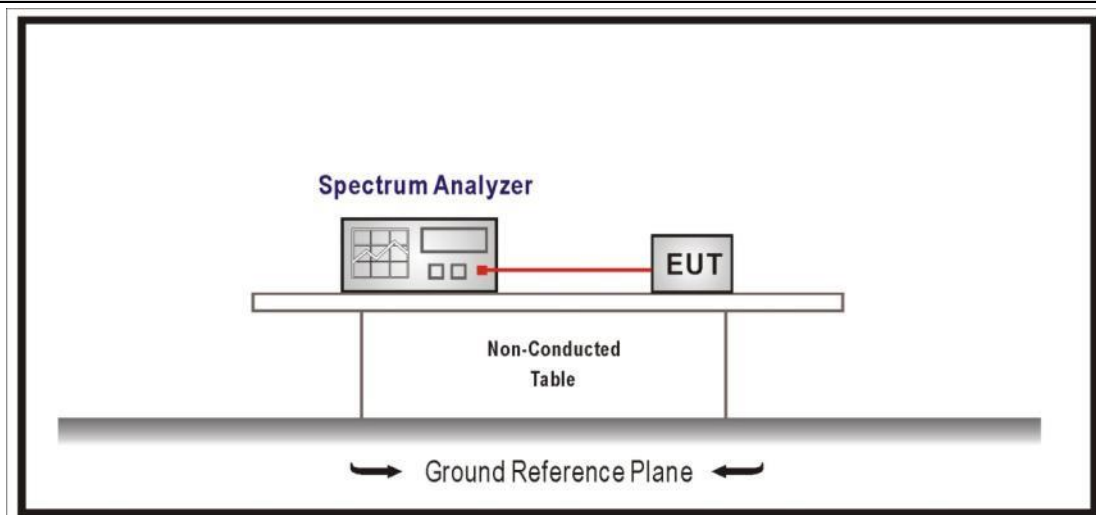
Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

4.6 DTS Bandwidth**VERDICT: PASS****4.6.1 Limit****Standard**

FCC Part 15 Subpart C Paragraph 15.247 (a)(2)

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

4.6.2 Test Setup**4.6.3 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

4.6.4 Test Data

Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (MHz)	6dB Occupied Bandwidth (kHz)	Limit of 6dB Occupied Bandwidth (kHz)	Result
1	00	2402	1029	630	>500	Pass
	19	2440	1020	650	>500	Pass
	39	2480	1031	638	>500	Pass
2	00	2402	2051	1043	>500	Pass
	19	2440	2053	1072	>500	Pass
	39	2480	2050	1024	>500	Pass
3	00	2402	1015	638	>500	Pass
	19	2440	1033	646	>500	Pass
	39	2480	1020	665	>500	Pass
4	00	2402	1050	643	>500	Pass
	19	2440	1054	588	>500	Pass
	39	2480	1050	570	>500	Pass

Note : The worst case of Occupied Bandwidth as below:

99% Occupied Bandwidth
Mode 2 CH19 (2440MHz)



6dB Occupied Bandwidth
Mode 2 CH00 (2402MHz)



4.7 Fundamental emission output power

VERDICT: PASS

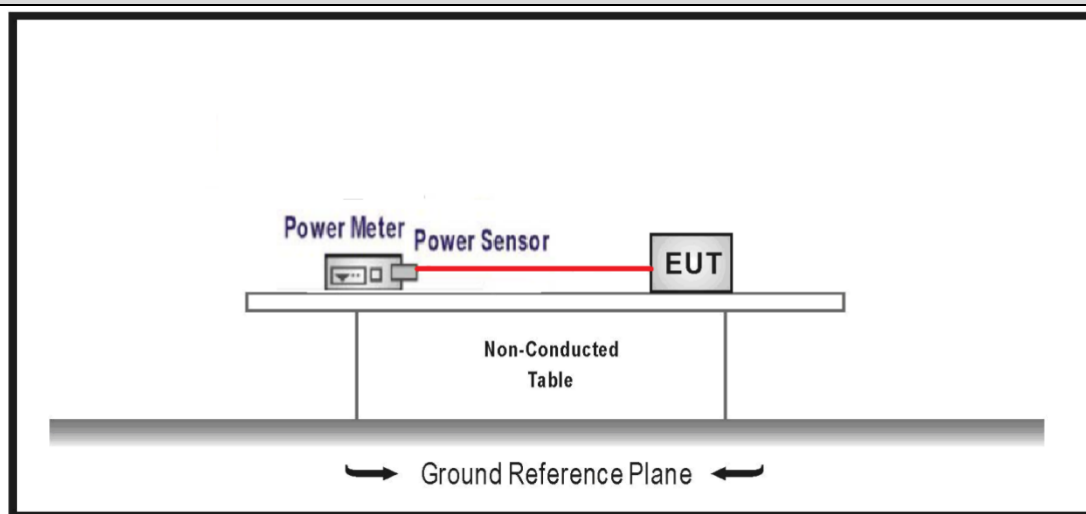
4.7.1 Limit

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
☐	Aggregate 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 peak conducted output power .

4.7.2 Test Setup



4.7.3 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 $\geq$ 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 $\geq 98\%$)
		☐	ANSI C63.10	11.9.2.2.3 Method AVGSA-1A(Duty cycle $\geq 98\%$)
		☐	ANSI C63.10	11.9.2.2.4 Method AVGSA-2(Duty cycle $\leq 98\%$)
		☐	ANSI C63.10	11.9.2.2.5 Method AVGSA-2A(Duty cycle $\leq 98\%$)
		☐	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

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
Mode 1	00	2402	6.45	7.45	≤30	≤36	Pass
	19	2440	6.42	7.42	≤30	≤36	Pass
	39	2480	6.22	7.22	≤30	≤36	Pass
Mode 2	00	2402	6.67	7.67	≤30	≤36	Pass
	19	2440	6.47	7.47	≤30	≤36	Pass
	39	2480	6.51	7.51	≤30	≤36	Pass
Mode 3	00	2402	6.44	7.44	≤30	≤36	Pass
	19	2440	6.42	7.42	≤30	≤36	Pass
	39	2480	6.20	7.20	≤30	≤36	Pass
Mode 4	00	2402	6.41	7.41	≤30	≤36	Pass
	19	2440	6.24	7.24	≤30	≤36	Pass
	39	2480	6.45	7.45	≤30	≤36	Pass

Note 1: EIRP=Conducted power+Antenna gain

Note 2: The antenna gain please refer to clause 1.2

4.8 Power Density

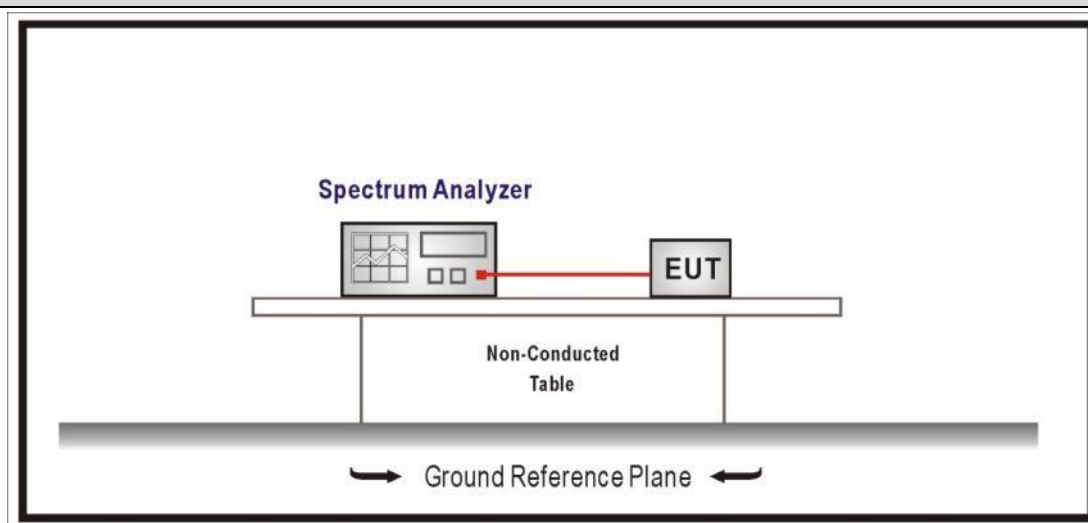
VERDICT: PASS

4.8.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
-----------------	---

Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

4.8.2 Test Setup



4.8.3 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 $\geq 98\%$)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle $\geq 98\%$)
	☐	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

4.8.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-8.651	≤8	Pass
	19	2440	-8.789	≤8	Pass
	39	2480	-8.869	≤8	Pass
Mode 2	00	2402	-10.062	≤8	Pass
	19	2440	-10.104	≤8	Pass
	39	2480	-10.259	≤8	Pass
Mode 3	00	2402	-0.649	≤8	Pass
	19	2440	-0.922	≤8	Pass
	39	2480	-1.061	≤8	Pass
Mode 4	00	2402	-0.471	≤8	Pass
	19	2440	-1.924	≤8	Pass
	39	2480	-1.065	≤8	Pass

Note : The worst case of PSD as below:

Mode 4 CH00 (2402MHz)



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.

_____ The End _____