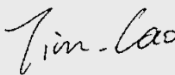
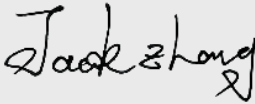


Test report No:
2290864R-RF-US-P06V01

FCC & ISED TEST REPORT

Product Name	Electronic fence transmitter
Trademark	CFMOTO
Model and /or type reference	CFEF-433AT
FCC ID	2A9ABCFEF-433AT
Applicant's name / address	ZHEJIANG CFMOTO POWER CO.,LTD. No.116,Wuzhou Road,Yuhang Economic Development Zone,Hangzhou City,Zhejiang ,China.
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	2023-01-10
Report Version	V3.0
Report template No	Template_FCC 15.247-RF-V1.0

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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-P06V01	V1.0	Initial issue of report.	2022-12-02
2290864R-RF-US-P06V01	V2.0	Update the applicant address, V1.0 has expired.	2022-12-03
2290864R-RF-US-P06V01	V3.0	Change the company and address of applicant and manufacturer, V2.0 has expired.	2023-01-10

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

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
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 transmitter
Model No. :	CFEF-433AT
FCC ID :	2A9ABCFEF-433AT
Manufacturer..... :	Shenzhen Yuanlai Intelligent Equipment Co., Ltd
Manufacturer Address..... :	103, building 27, Yingshui villa, Minle community, Minzhi street, Longhua District, Shenzhen city, Guangdong China.
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

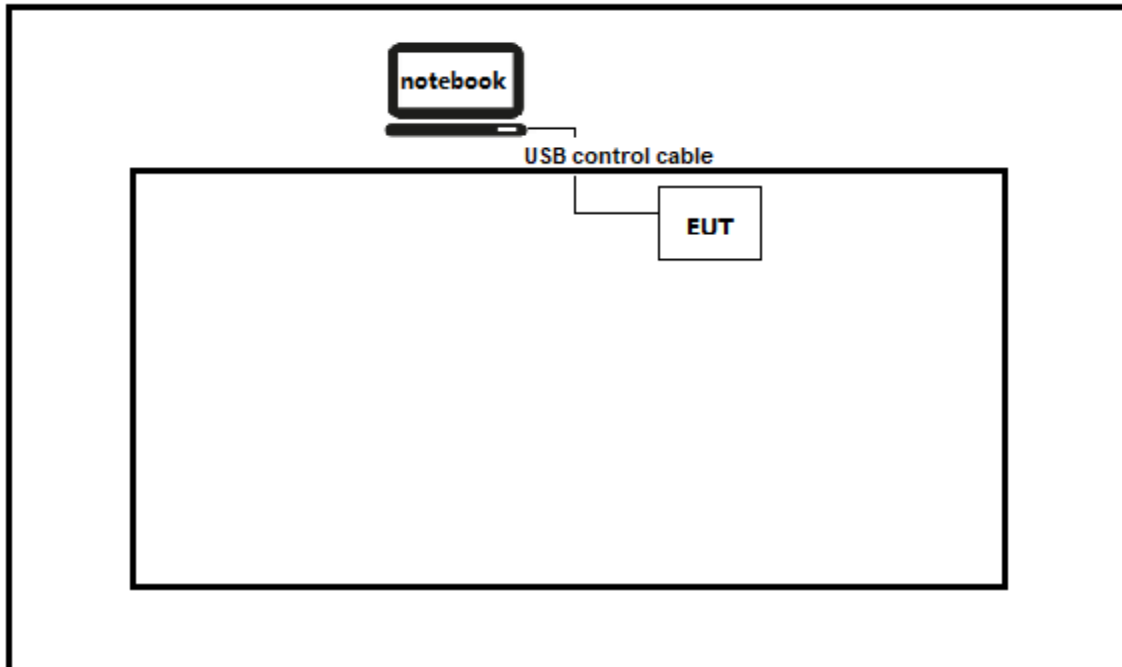
Accessories Information	Brand/model name	Cable		
		Length used during test [m]	Attached during test	Shielded
USB Cable	N/A	10	☒	☒
USB Cable	N/A	0.5	☒	☒

2.3 Auxiliary equipment / Test software for the EUT

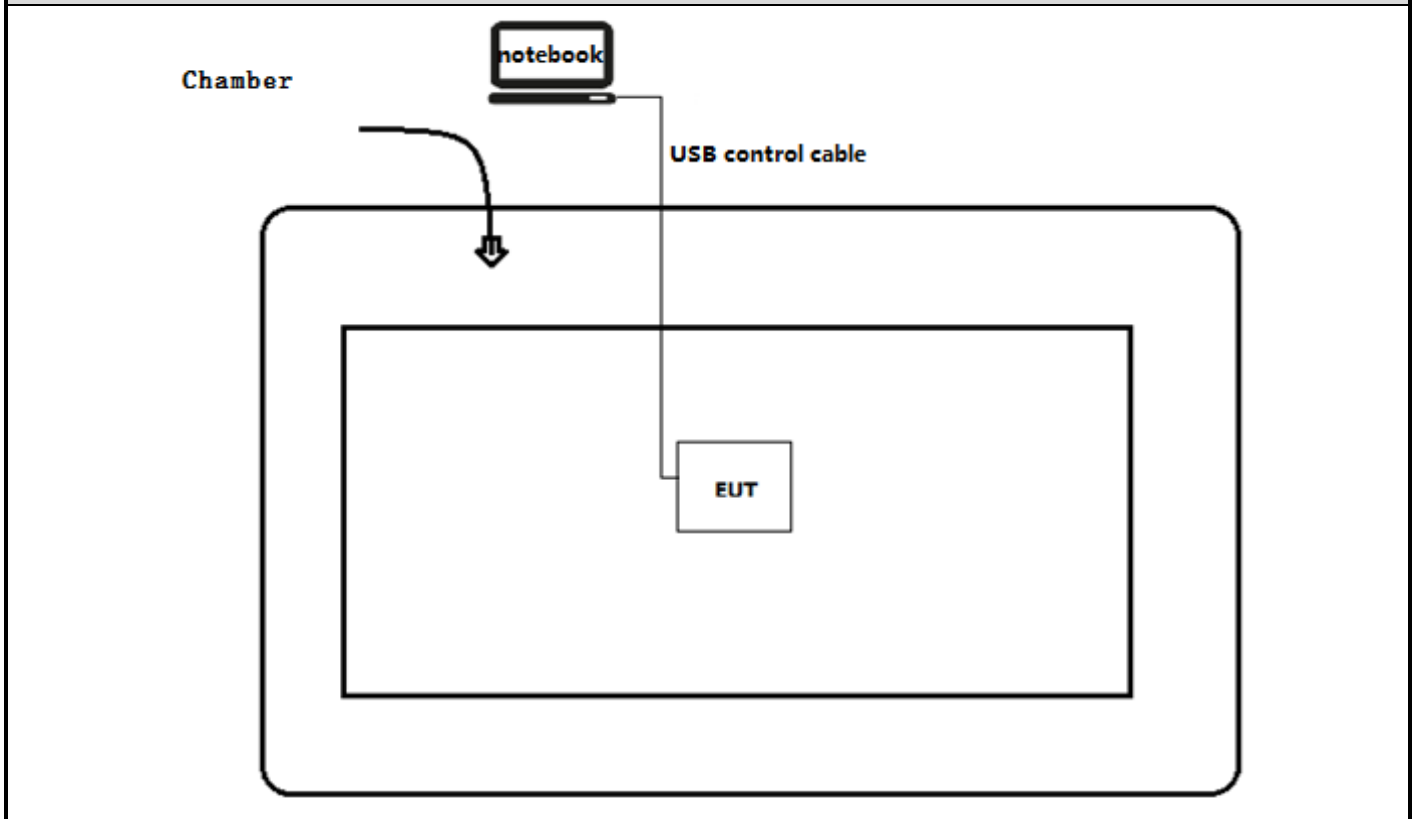
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	Think pad x280	Lenovo	N/A
Software	Type / Version	Manufacturer	Supplied by
ApprobationTool	1.5.6	N/A	N/A

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
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 Emissions in restricted frequency bands

VERDICT: PASS

4.1.1 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).

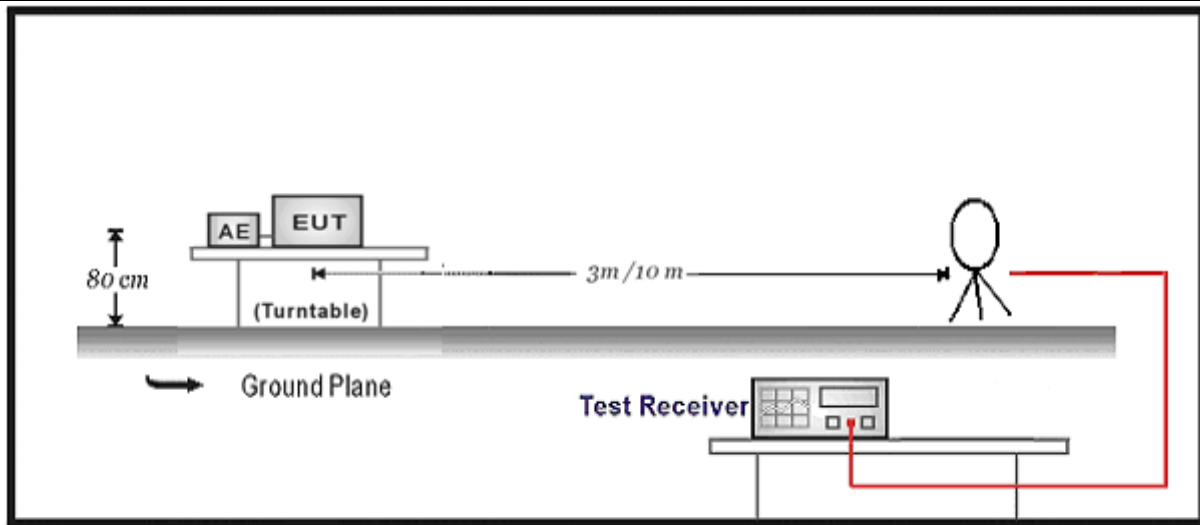
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated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

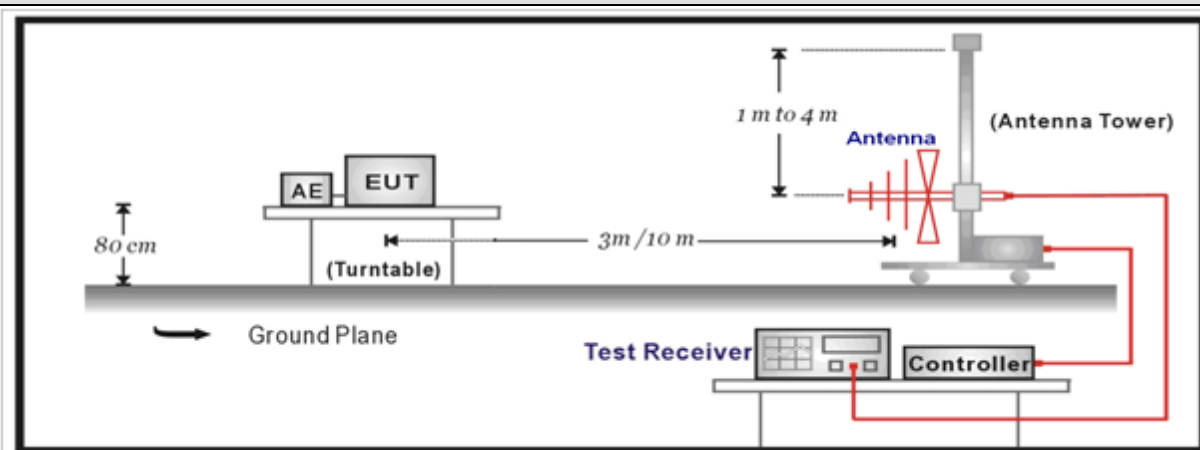
measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.1.2 Test Setup

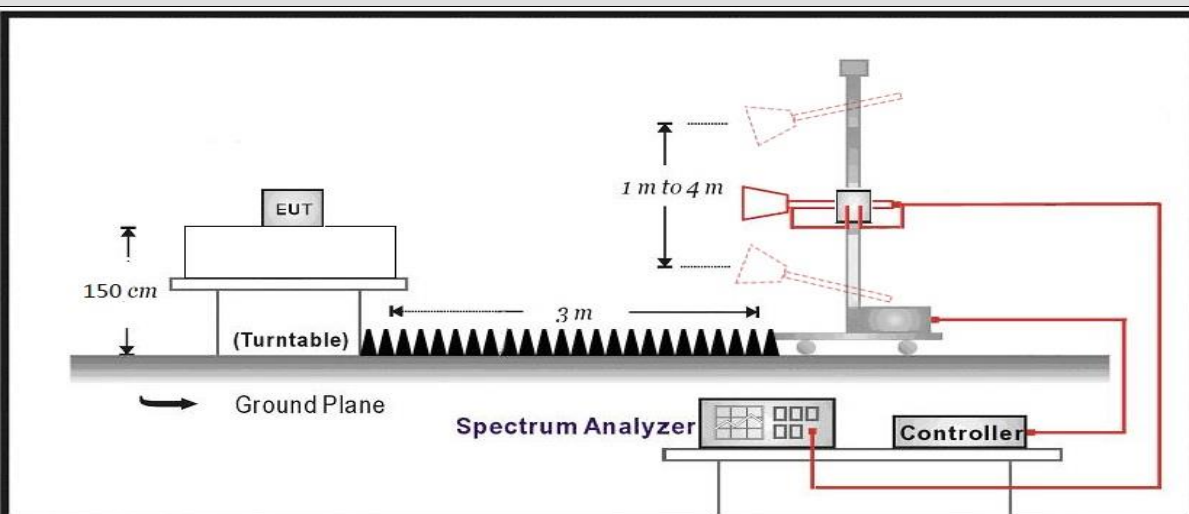
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:

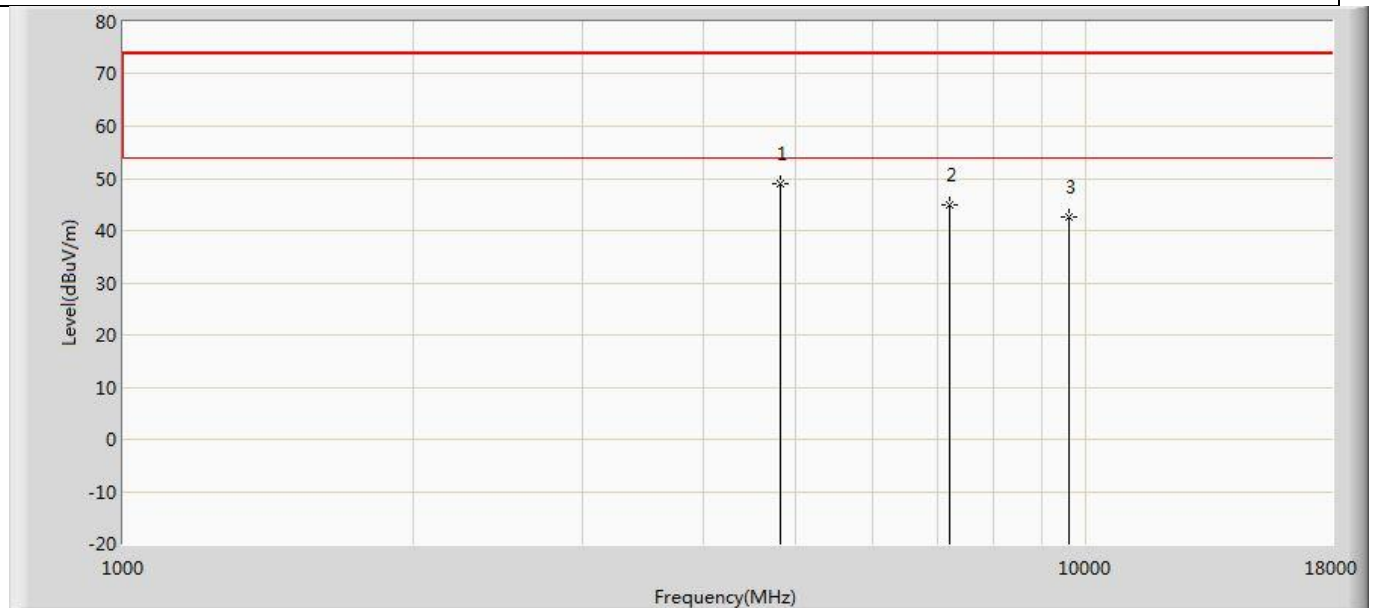


4.1.3 Test Procedure

	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	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

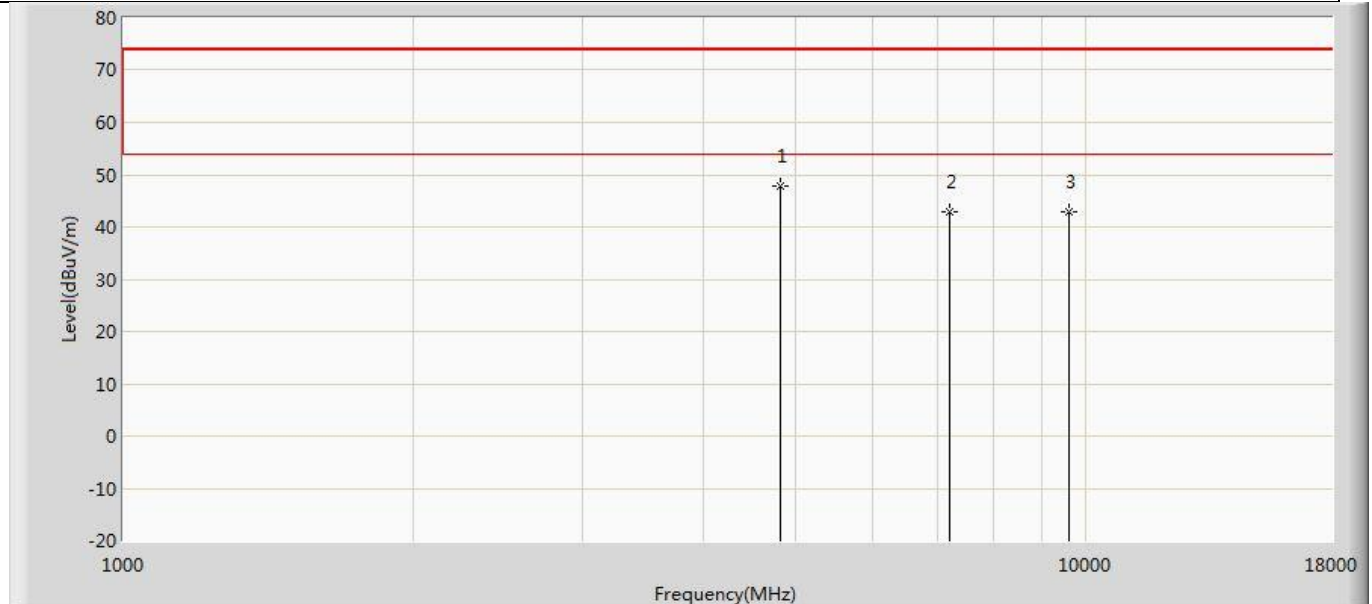
4.1.4 Test Data

Profile: 2290864R	Page No.: 25
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



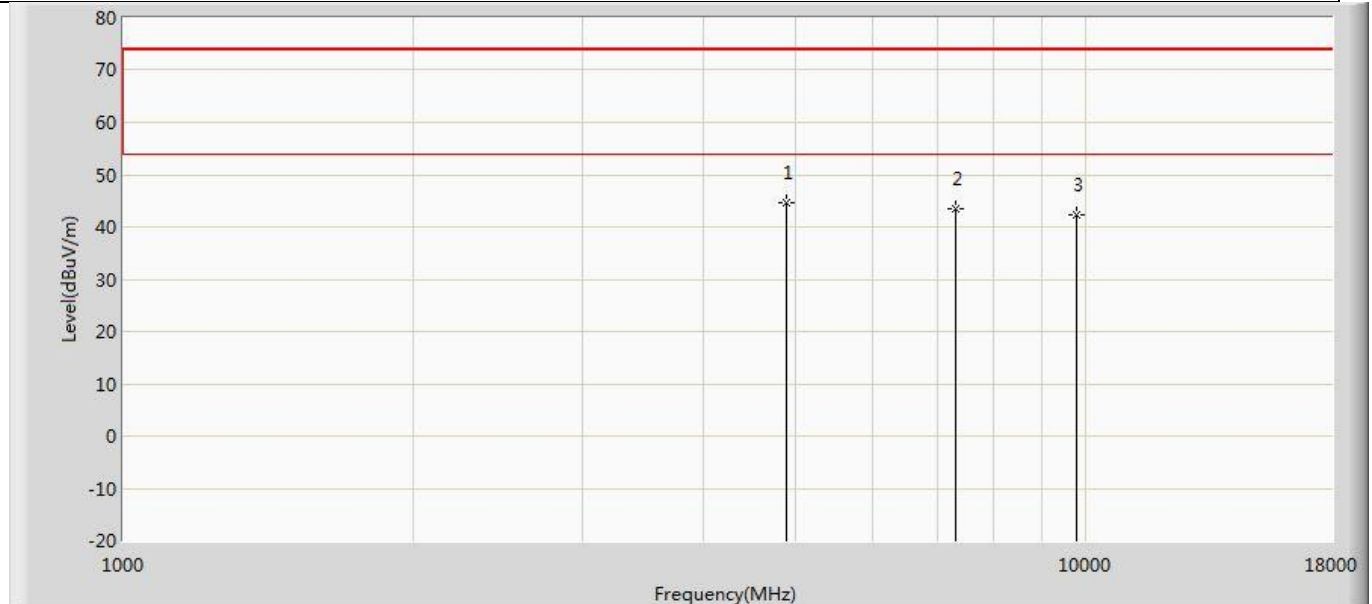
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	48.974	54.760	-25.026	74.000	-5.786	PK
2		7205.000	45.013	48.036	-28.987	74.000	-3.023	PK
3		9608.000	42.649	44.903	-31.351	74.000	-2.254	PK

Profile: 2290864R	Page No.: 26
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



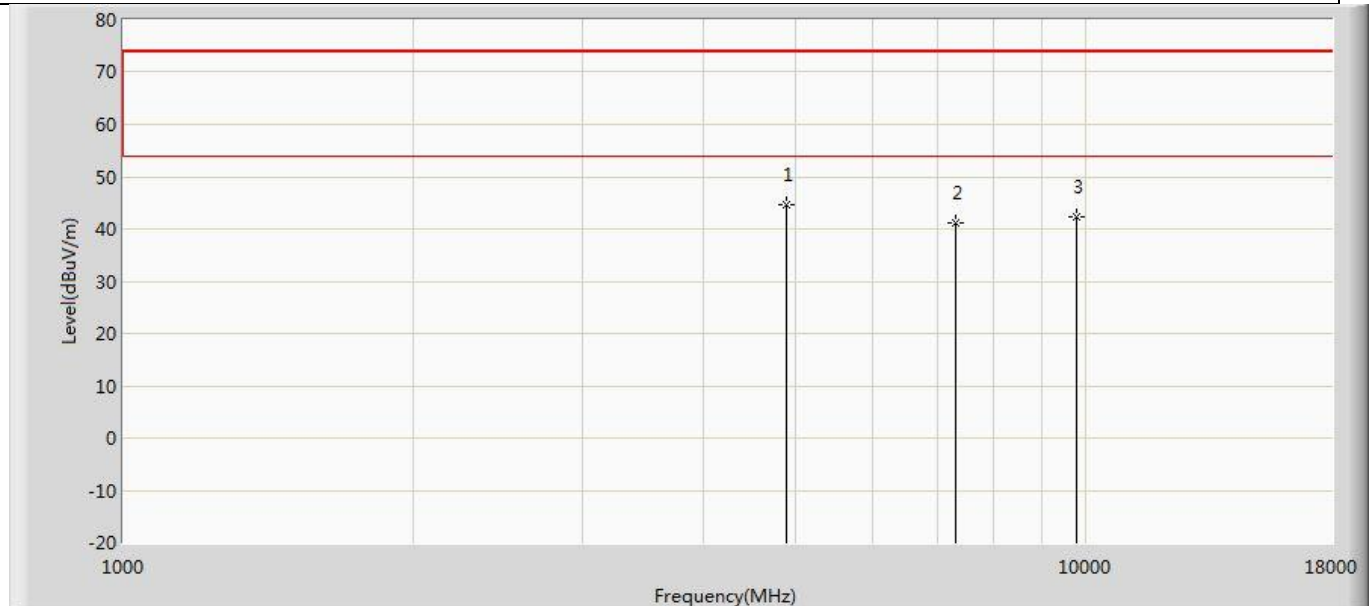
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.700	53.486	-26.300	74.000	-5.786	PK
2		7206.000	42.802	45.828	-31.198	74.000	-3.026	PK
3		9608.000	43.002	45.256	-30.998	74.000	-2.254	PK

Profile: 2290864R	Page No.: 27
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



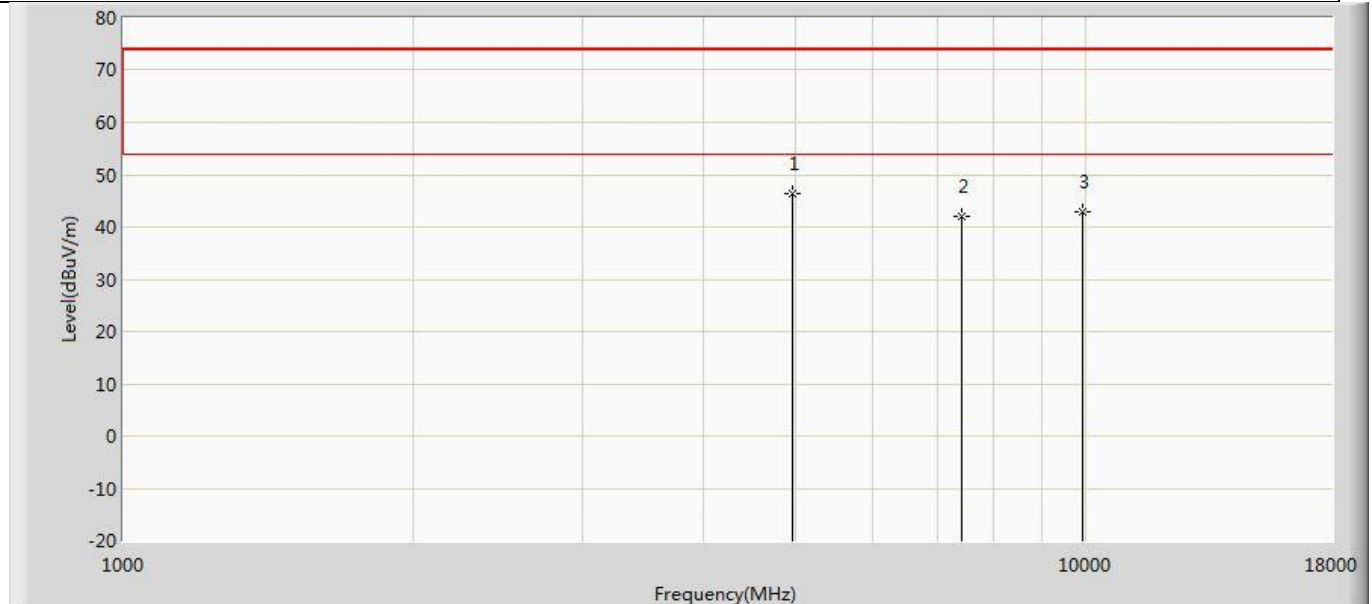
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4880.000	44.533	50.354	-29.467	74.000	-5.822	PK
2		7320.000	43.389	46.810	-30.611	74.000	-3.420	PK
3		9760.000	42.302	44.151	-31.698	74.000	-1.848	PK

Profile: 2290864R	Page No.: 28
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2440MHz by LE_1Mbps	



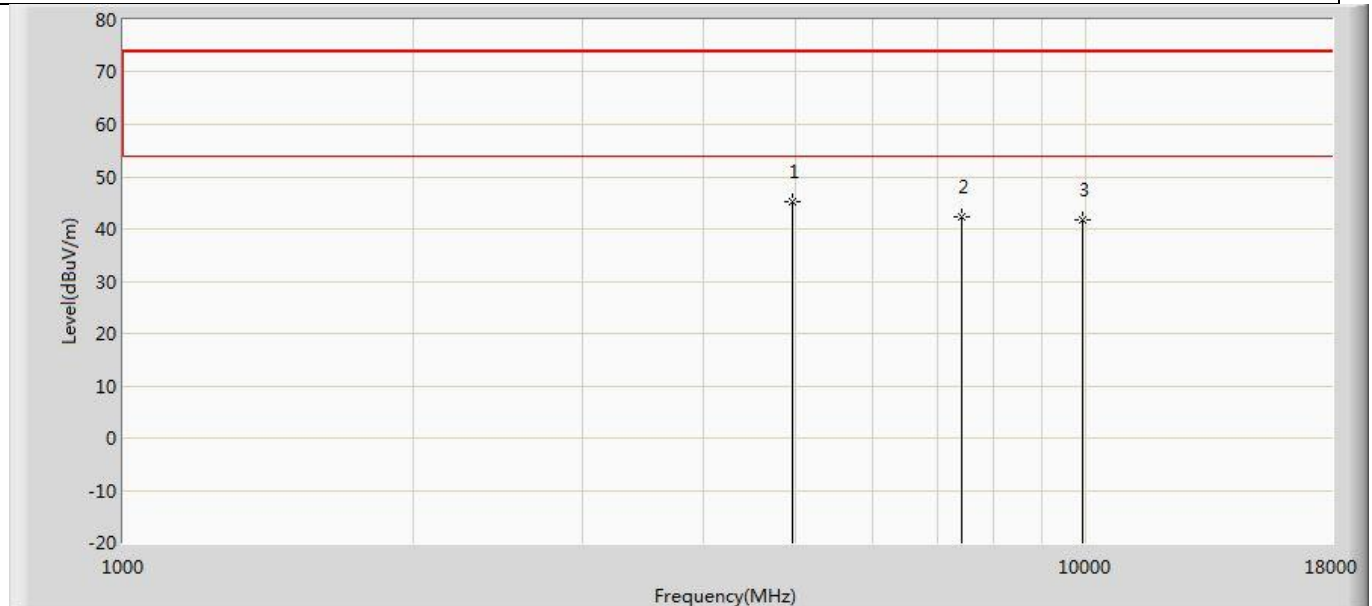
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4880.000	44.683	50.504	-29.317	74.000	-5.822	PK
2		7320.000	41.217	44.638	-32.783	74.000	-3.420	PK
3		9760.000	42.283	44.132	-31.717	74.000	-1.848	PK

Profile: 2290864R	Page No.: 29
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



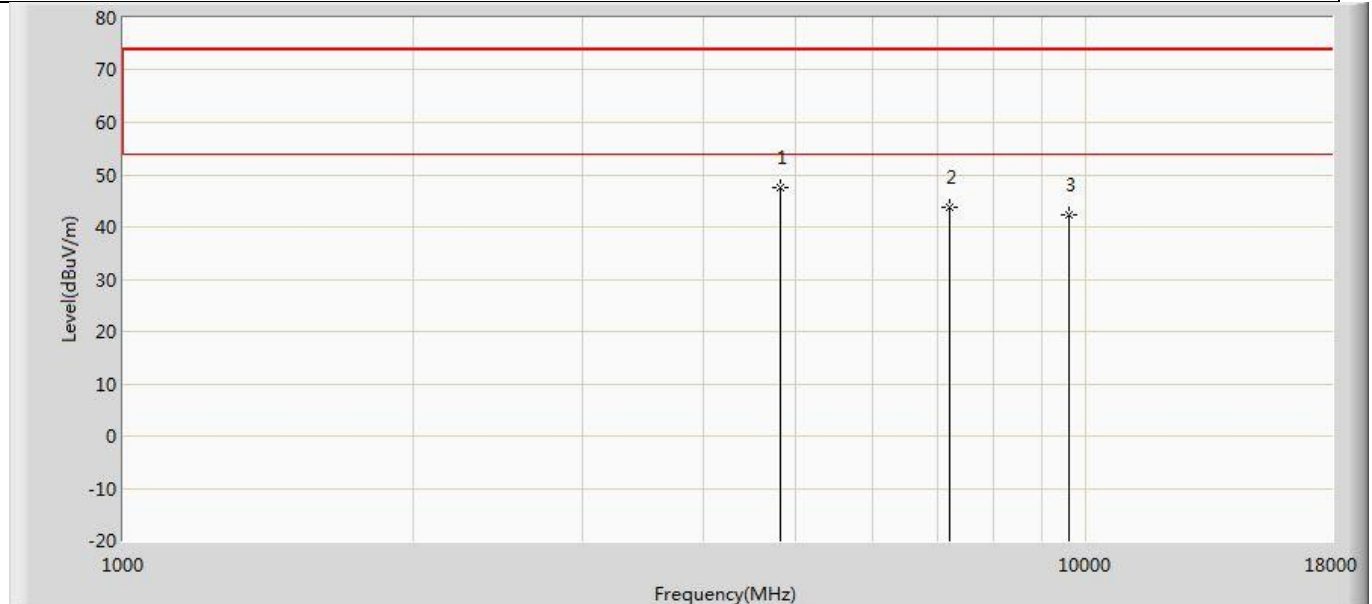
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4960.000	46.415	52.012	-27.585	74.000	-5.598	PK
2		7440.000	42.058	45.224	-31.942	74.000	-3.166	PK
3		9920.000	42.853	44.544	-31.147	74.000	-1.690	PK

Profile: 2290864R	Page No.: 30
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



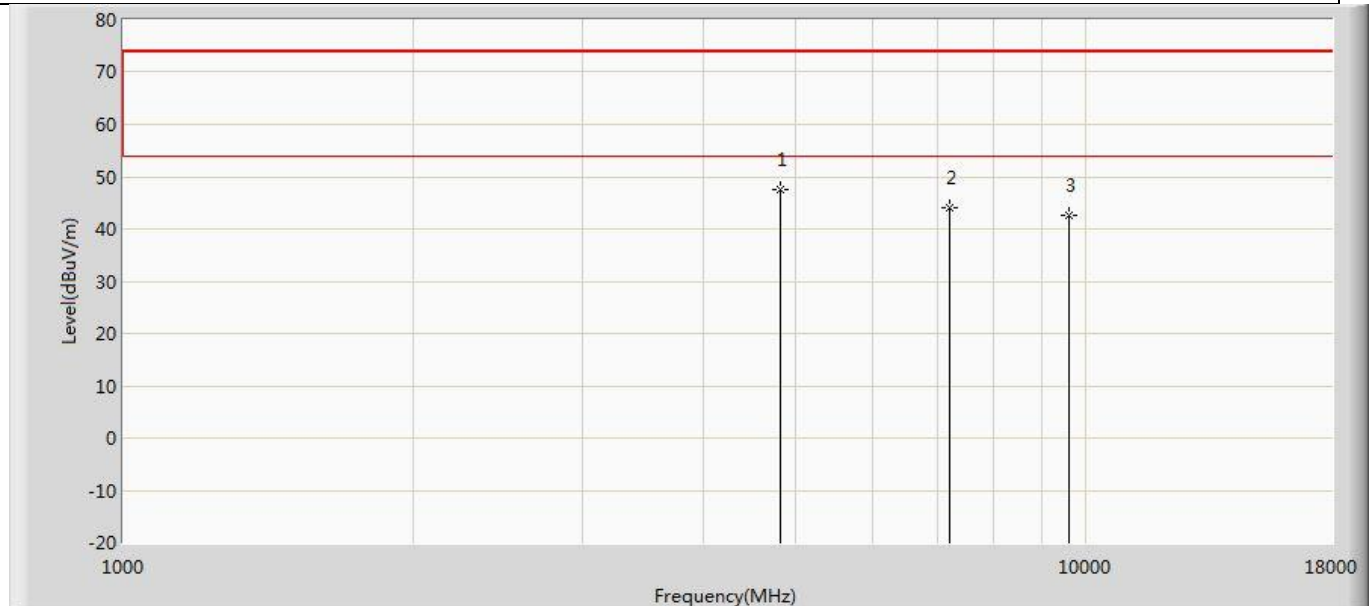
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4960.000	45.120	50.717	-28.880	74.000	-5.598	PK
2		7440.000	42.305	45.471	-31.695	74.000	-3.166	PK
3		9920.000	41.854	43.545	-32.146	74.000	-1.690	PK

Profile: 2290864R	Page No.: 31
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



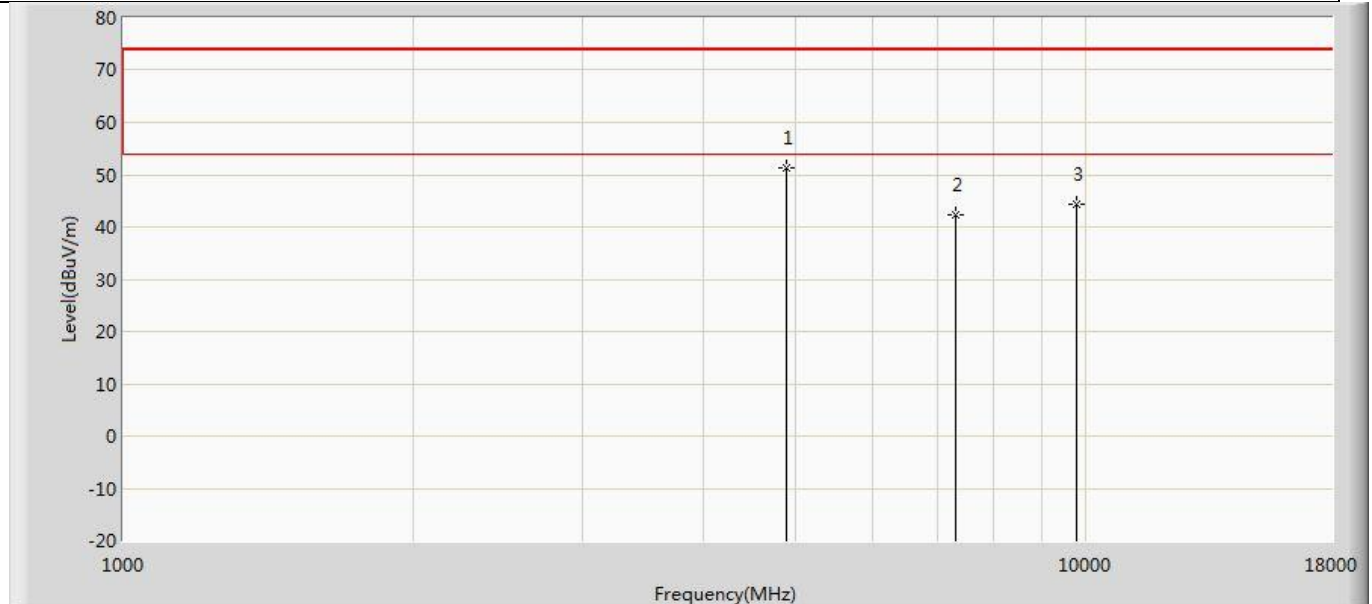
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.631	53.417	-26.369	74.000	-5.786	PK
2		7205.000	43.711	46.734	-30.289	74.000	-3.023	PK
3		9608.000	42.322	44.576	-31.678	74.000	-2.254	PK

Profile: 2290864R	Page No.: 32
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



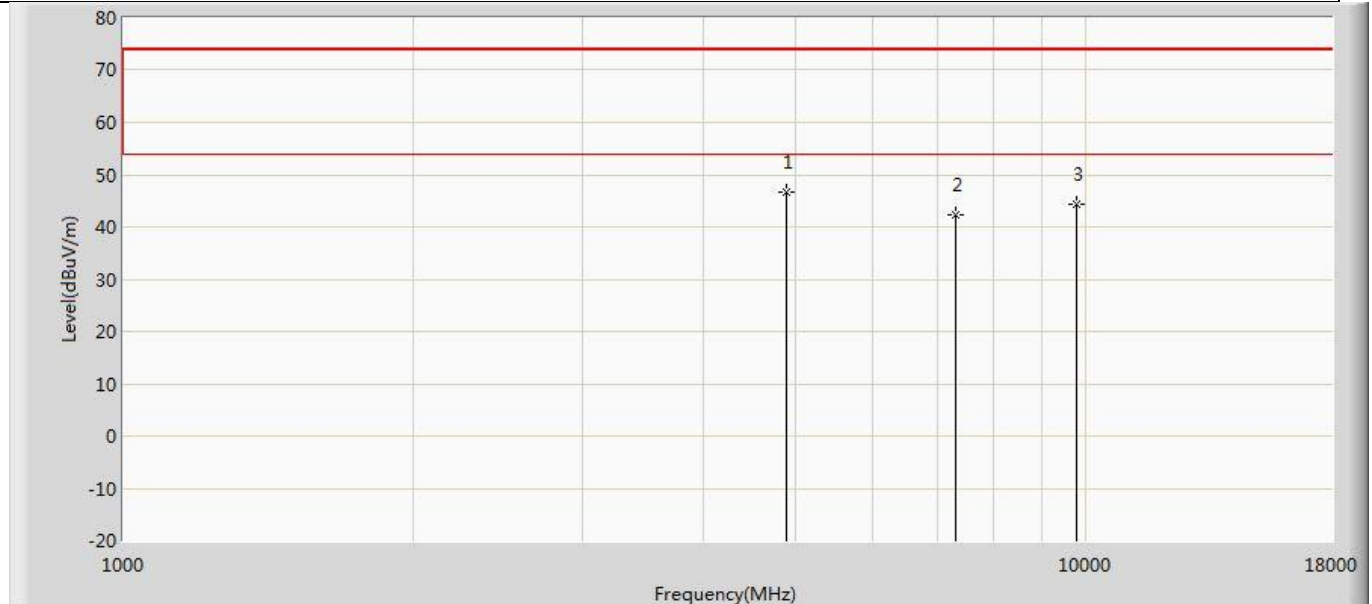
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.566	53.352	-26.434	74.000	-5.786	PK
2		7205.000	44.191	47.214	-29.809	74.000	-3.023	PK
3		9608.000	42.658	44.912	-31.342	74.000	-2.254	PK

Profile: 2290864R	Page No.: 33
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



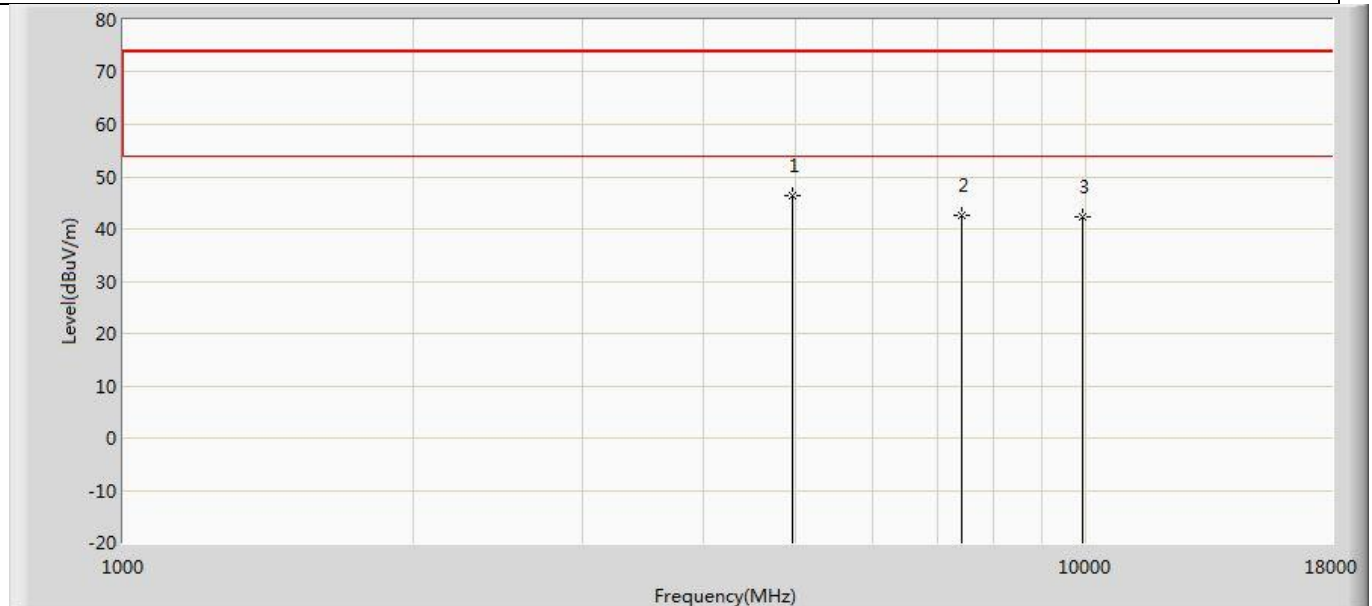
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	51.361	57.149	-22.639	74.000	-5.788	PK
2		7320.000	42.428	45.849	-31.572	74.000	-3.420	PK
3		9760.000	44.207	46.056	-29.793	74.000	-1.848	PK

Profile: 2290864R	Page No.: 34
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2440MHz by LE_2Mbps	



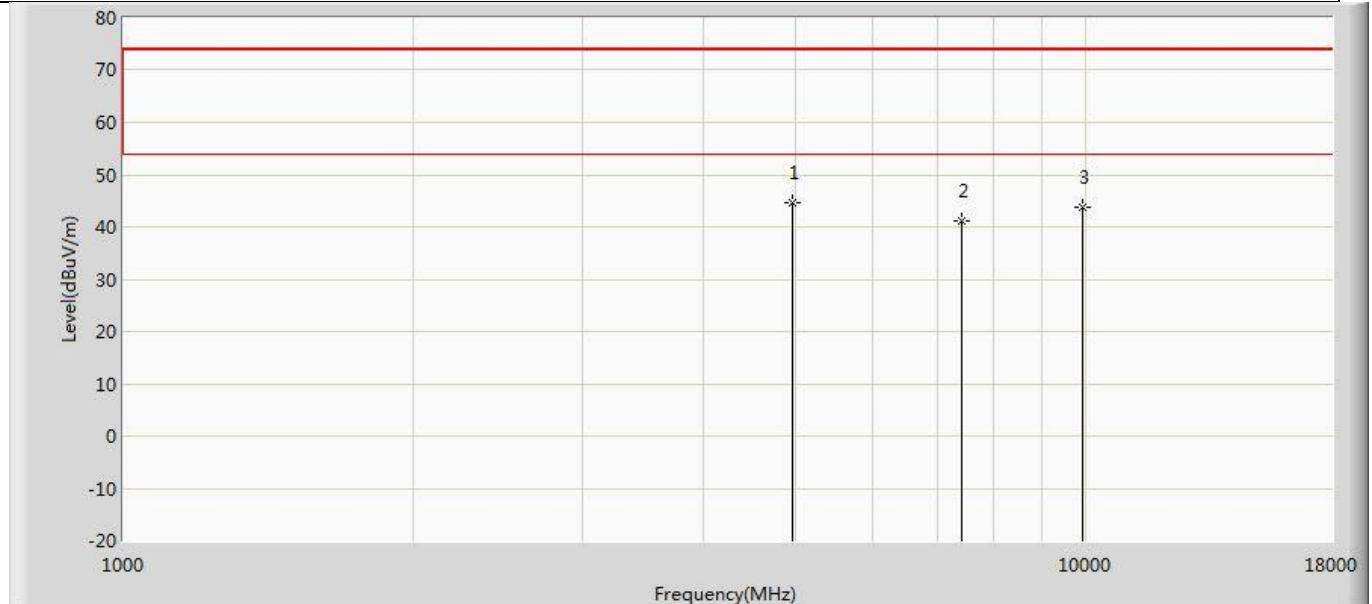
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	46.697	52.485	-27.303	74.000	-5.788	PK
2		7320.000	42.348	45.769	-31.652	74.000	-3.420	PK
3		9760.000	44.393	46.242	-29.607	74.000	-1.848	PK

Profile: 2290864R	Page No.: 35
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



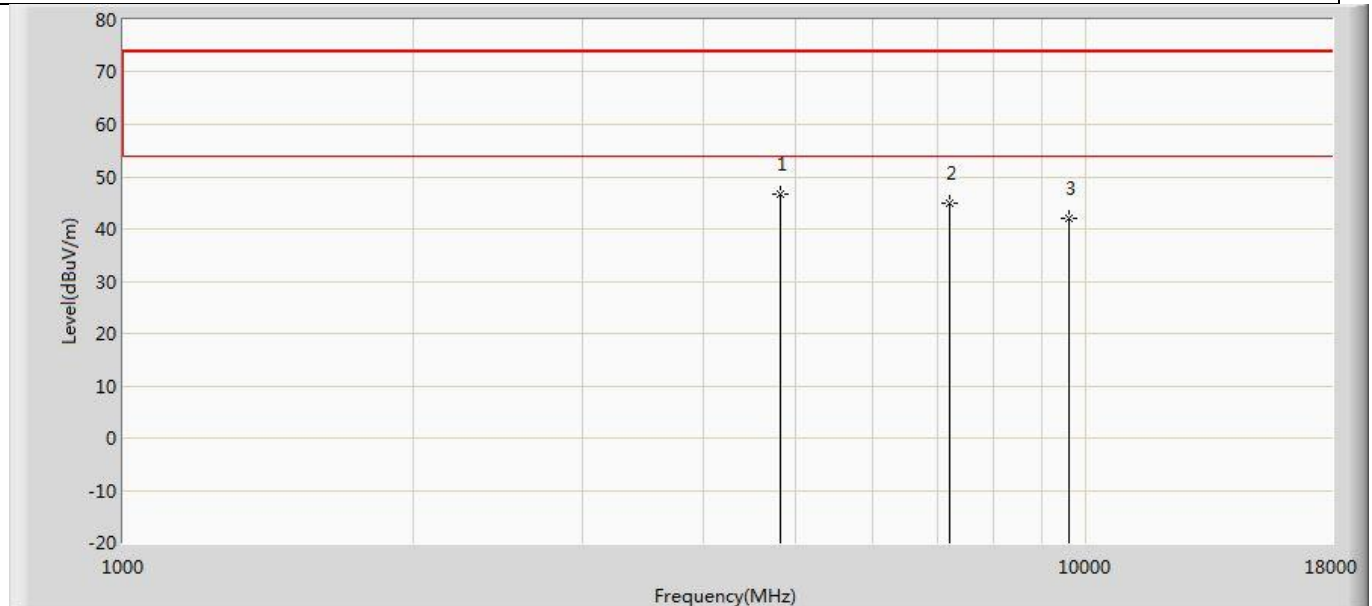
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	46.404	51.995	-27.596	74.000	-5.591	PK
2		7440.000	42.692	45.858	-31.308	74.000	-3.166	PK
3		9920.000	42.363	44.054	-31.637	74.000	-1.690	PK

Profile: 2290864R	Page No.: 36
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



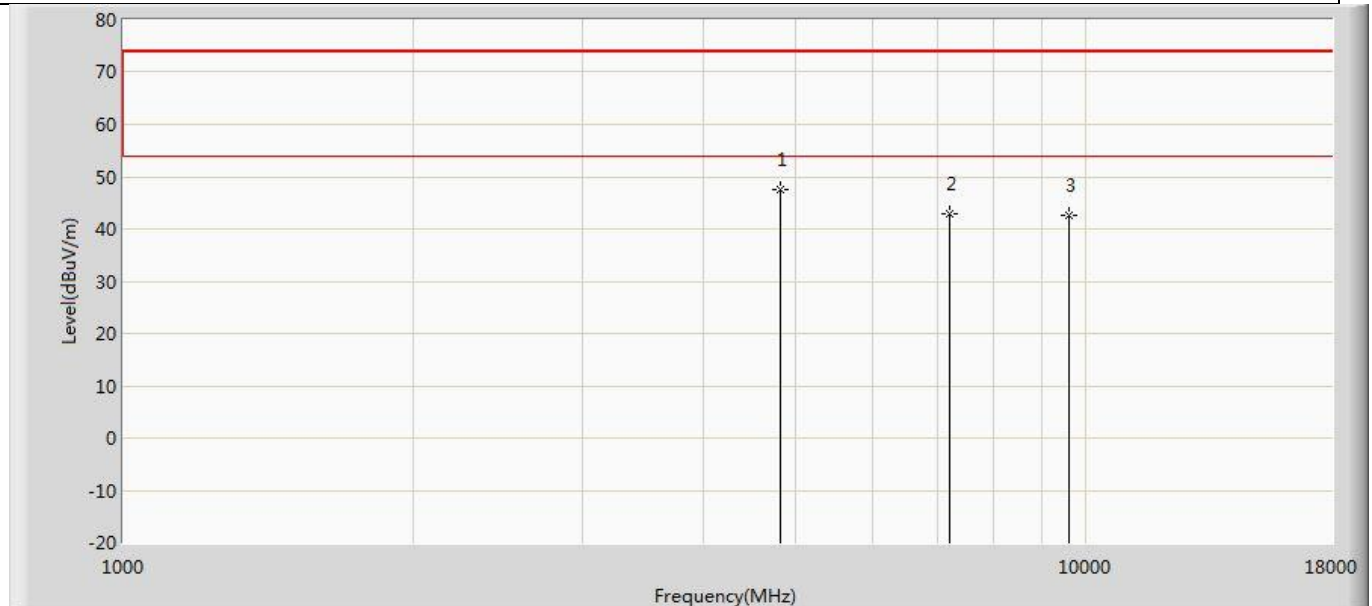
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	44.599	50.190	-29.401	74.000	-5.591	PK
2		7440.000	41.302	44.468	-32.698	74.000	-3.166	PK
3		9920.000	43.718	45.409	-30.282	74.000	-1.690	PK

Profile: 2290864R	Page No.: 37
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



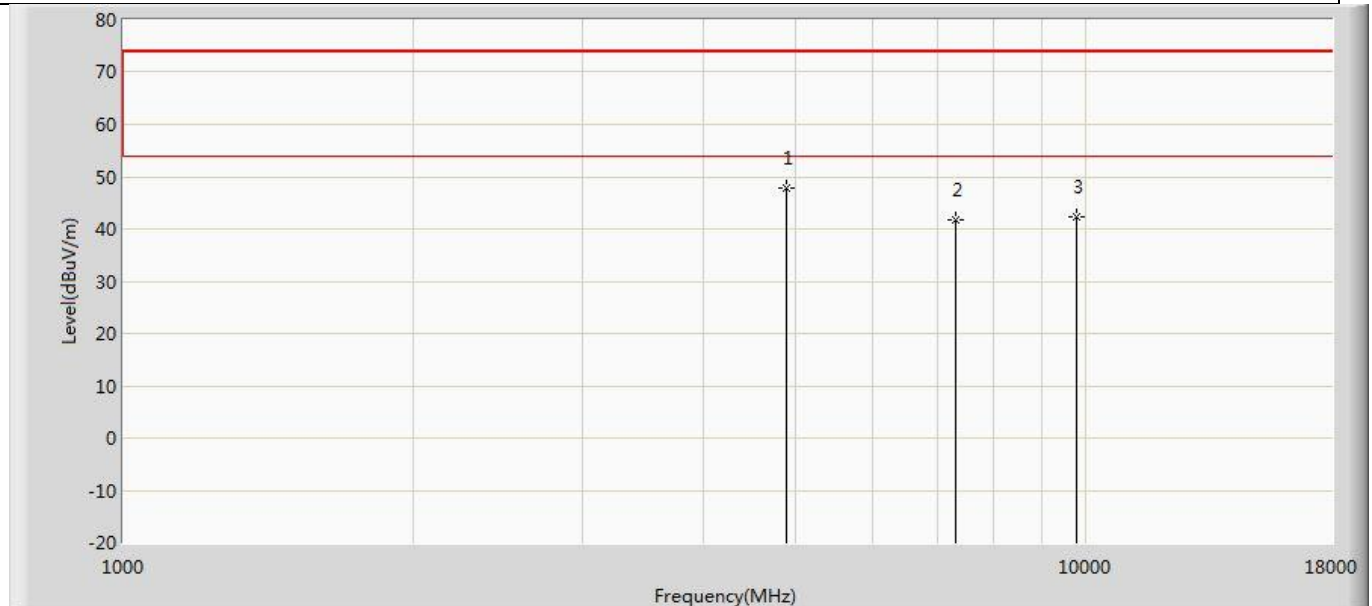
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	46.682	52.468	-27.318	74.000	-5.786	PK
2		7205.000	44.997	48.020	-29.003	74.000	-3.023	PK
3		9608.000	42.141	44.395	-31.859	74.000	-2.254	PK

Profile: 2290864R	Page No.: 38
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



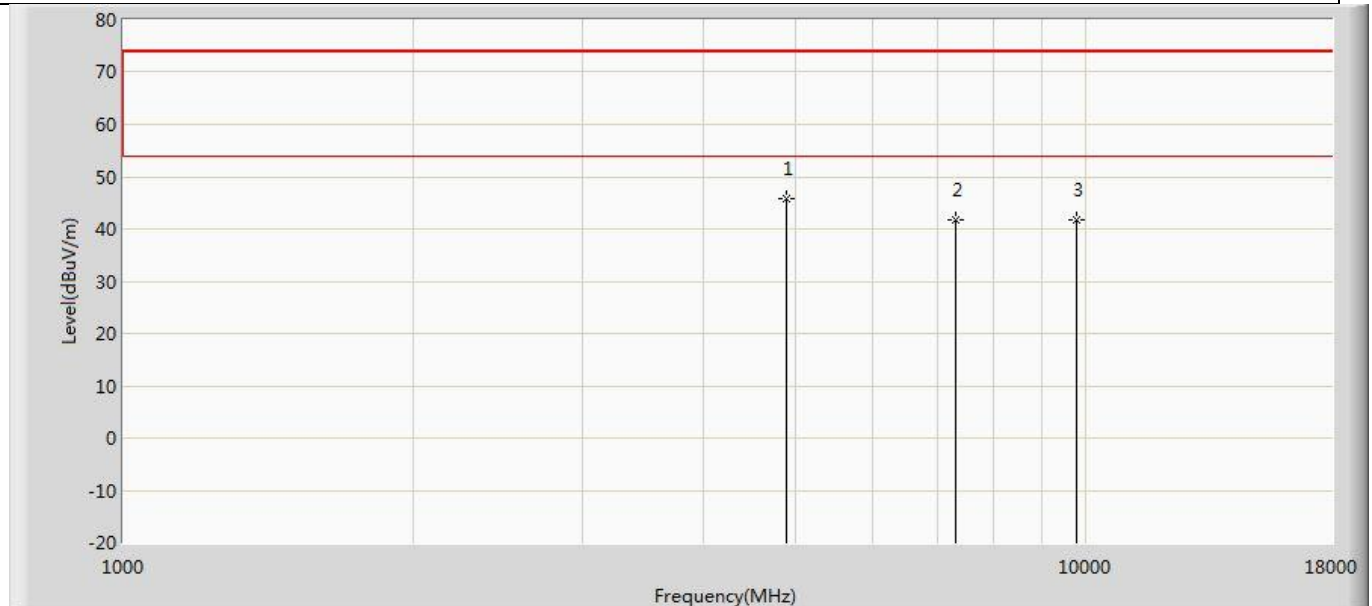
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.664	53.450	-26.336	74.000	-5.786	PK
2		7205.000	42.901	45.924	-31.099	74.000	-3.023	PK
3		9608.000	42.743	44.997	-31.257	74.000	-2.254	PK

Profile: 2290864R	Page No.: 39
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2440MHz by LE_Coded S=8	



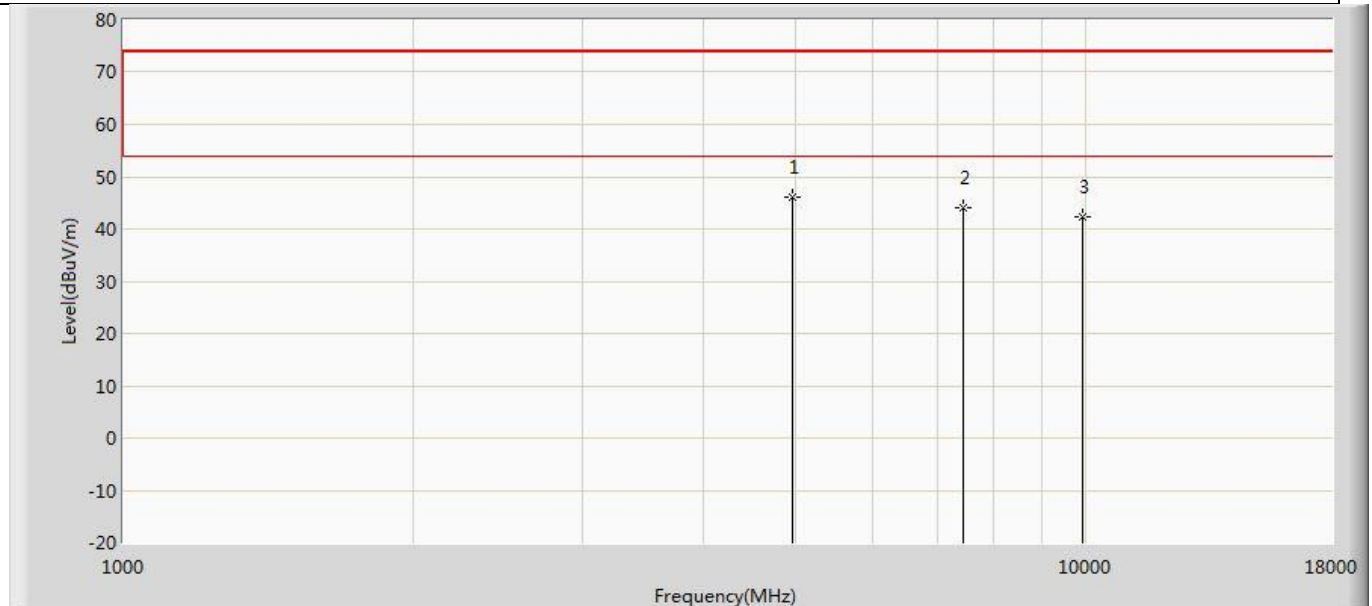
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	47.740	53.528	-26.260	74.000	-5.788	PK
2		7320.000	41.605	45.026	-32.395	74.000	-3.420	PK
3		9760.000	42.194	44.043	-31.806	74.000	-1.848	PK

Profile: 2290864R	Page No.: 40
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2440MHz by LE_Coded S=8	



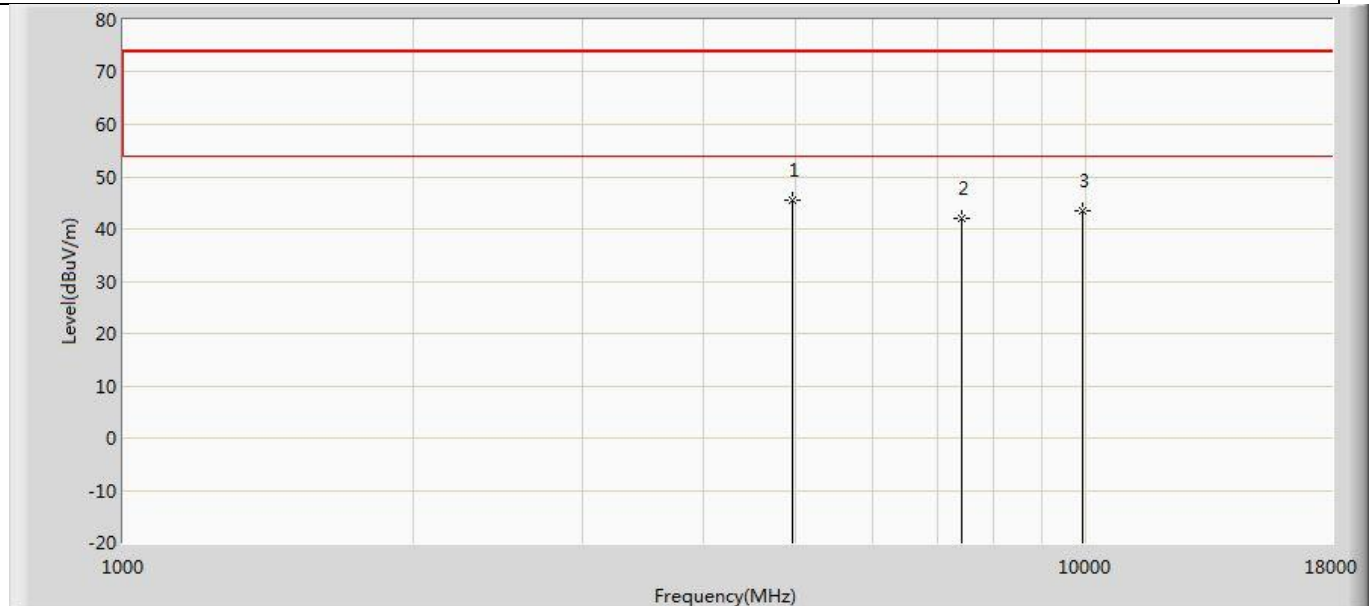
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	45.660	51.448	-28.340	74.000	-5.788	PK
2		7320.000	41.619	45.040	-32.381	74.000	-3.420	PK
3		9760.000	41.809	43.658	-32.191	74.000	-1.848	PK

Profile: 2290864R	Page No.: 41
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



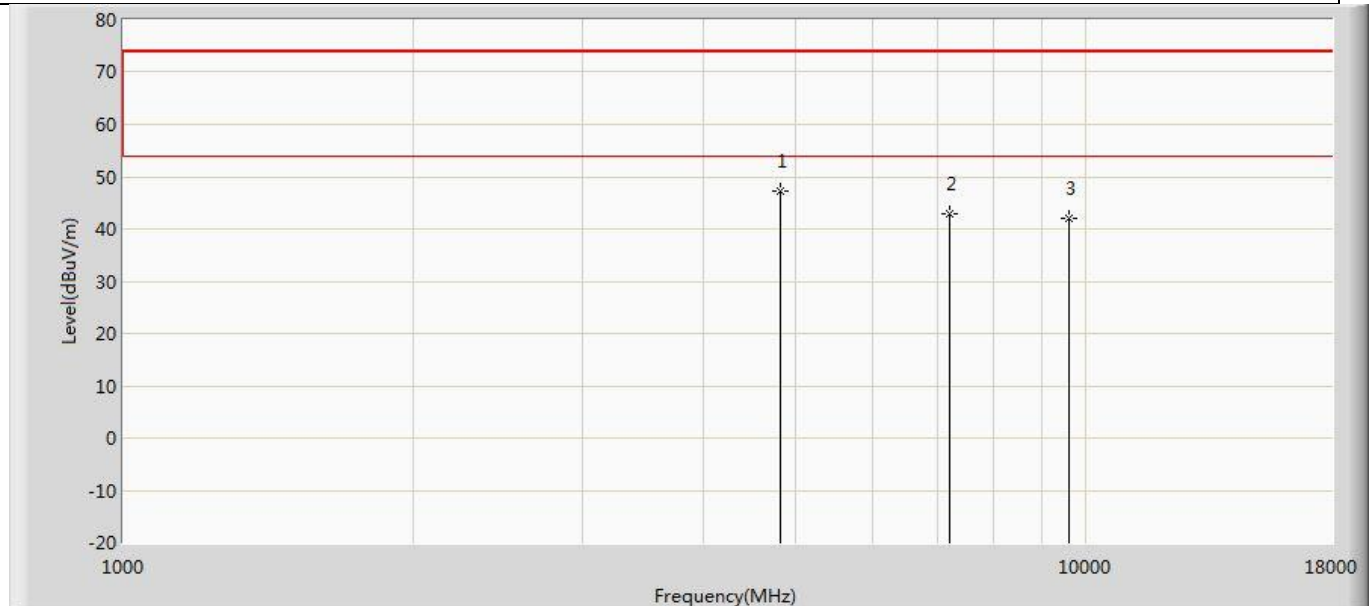
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	46.066	51.657	-27.934	74.000	-5.591	PK
2		7443.000	44.188	47.367	-29.812	74.000	-3.179	PK
3		9920.000	42.294	43.985	-31.706	74.000	-1.690	PK

Profile: 2290864R	Page No.: 42
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



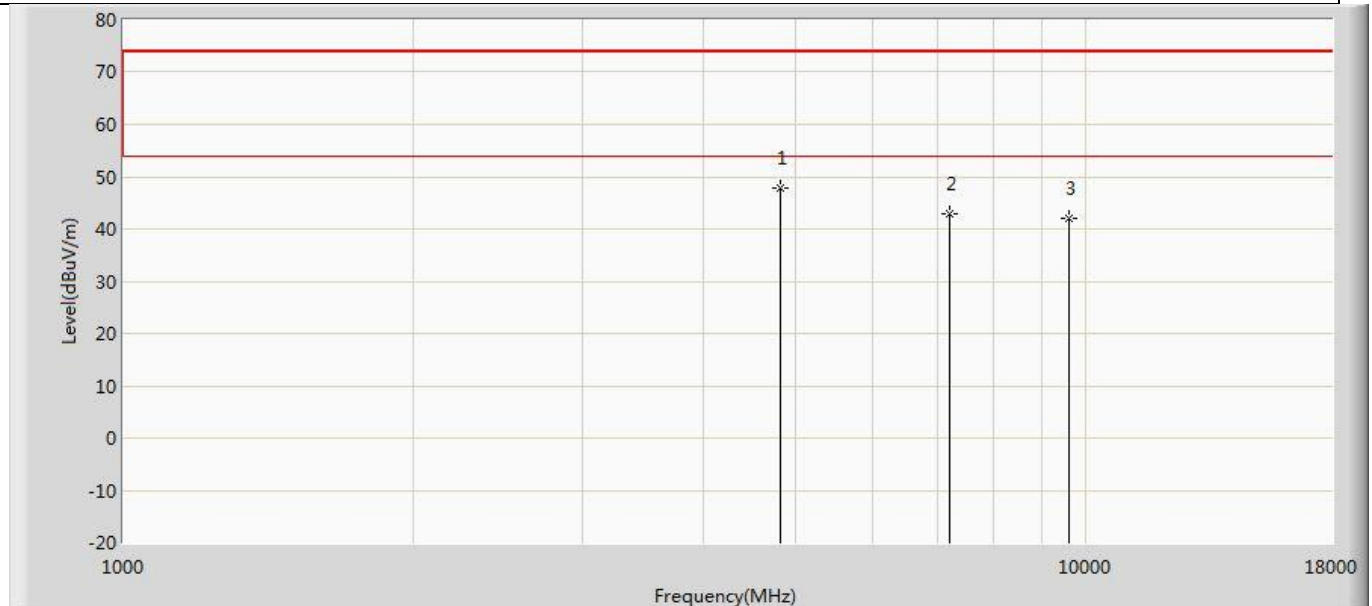
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	45.620	51.211	-28.380	74.000	-5.591	PK
2		7440.000	41.925	45.091	-32.075	74.000	-3.166	PK
3		9920.000	43.460	45.151	-30.540	74.000	-1.690	PK

Profile: 2290864R	Page No.: 43
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



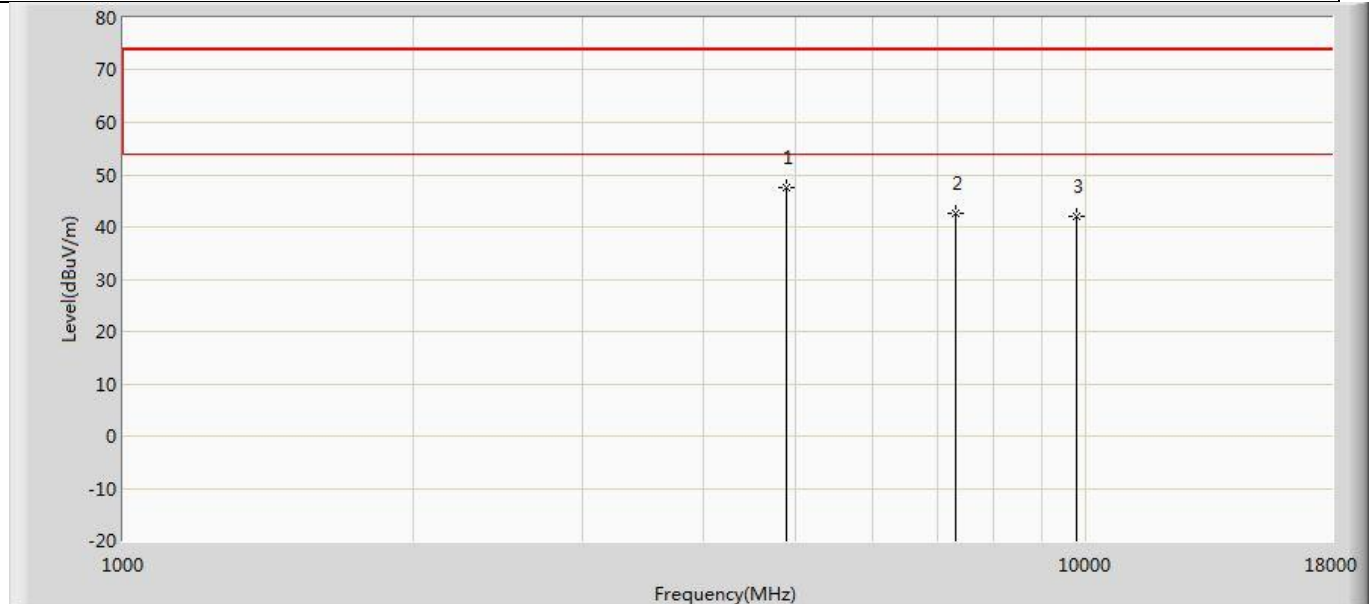
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.105	52.891	-26.895	74.000	-5.786	PK
2		7205.000	42.900	45.923	-31.100	74.000	-3.023	PK
3		9608.000	41.968	44.222	-32.032	74.000	-2.254	PK

Profile: 2290864R	Page No.: 44
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



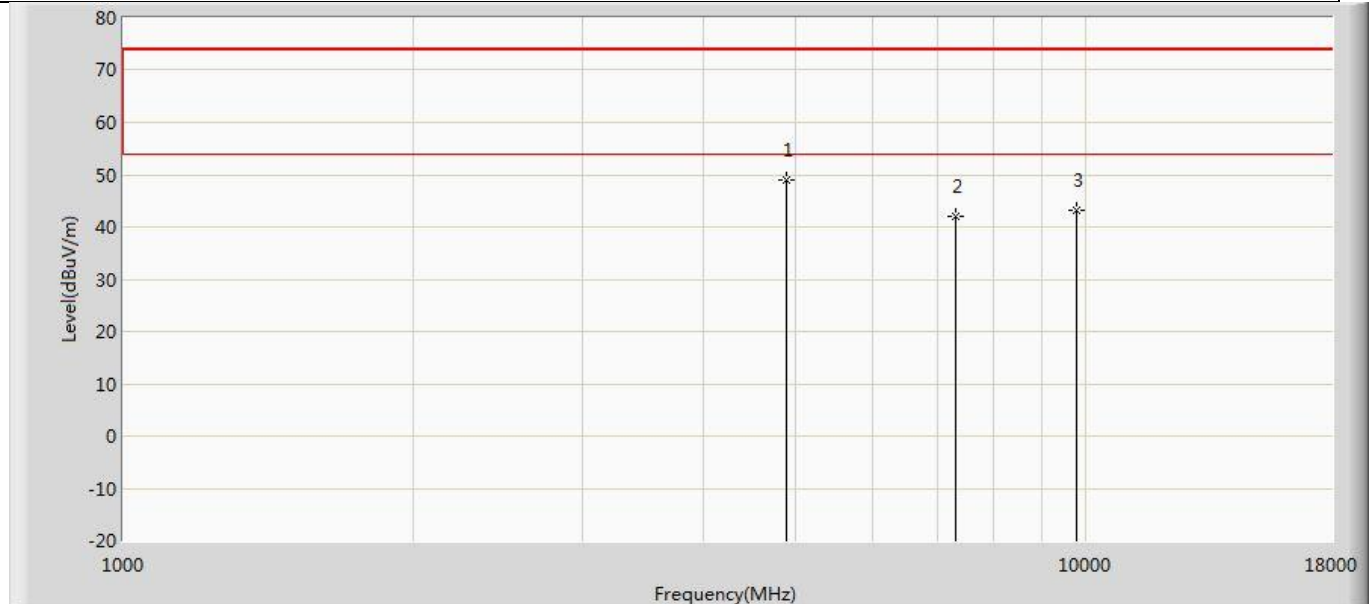
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4808.000	47.721	53.507	-26.279	74.000	-5.786	PK
2		7205.000	42.874	45.897	-31.126	74.000	-3.023	PK
3		9608.000	42.156	44.410	-31.844	74.000	-2.254	PK

Profile: 2290864R	Page No.: 45
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2440MHz by LE_Coded S=2	



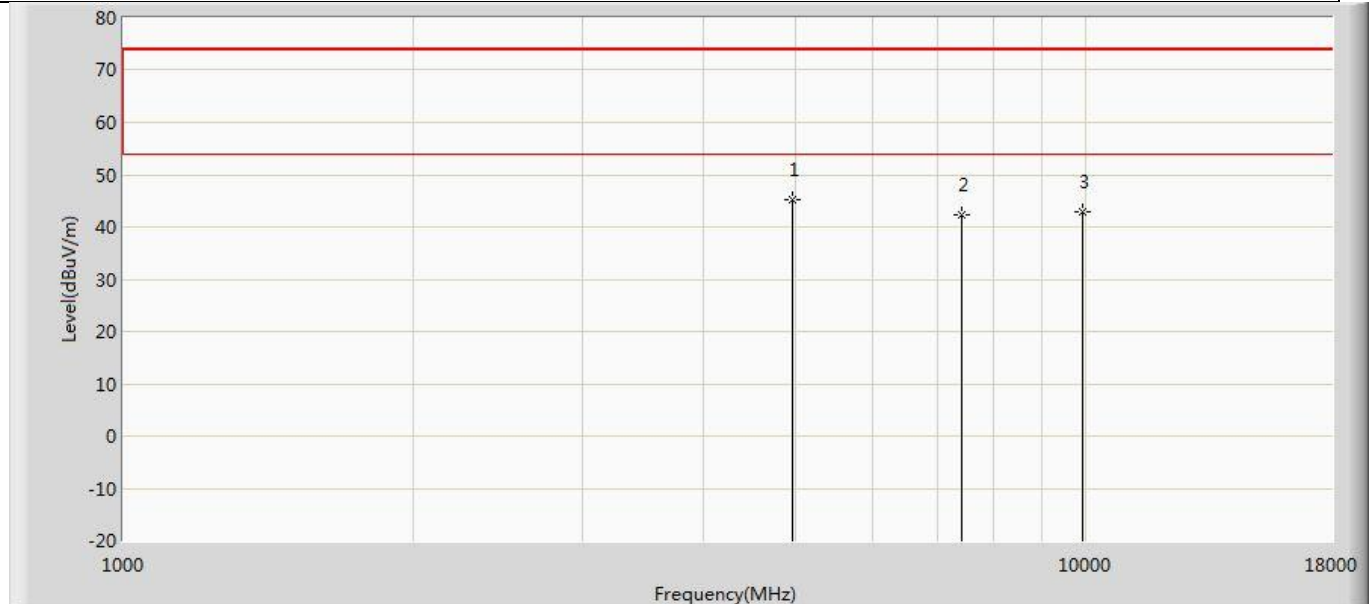
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	47.523	53.311	-26.477	74.000	-5.788	PK
2		7320.000	42.468	45.889	-31.532	74.000	-3.420	PK
3		9760.000	41.994	43.843	-32.006	74.000	-1.848	PK

Profile: 2290864R	Page No.: 46
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2440MHz by LE_Coded S=2	



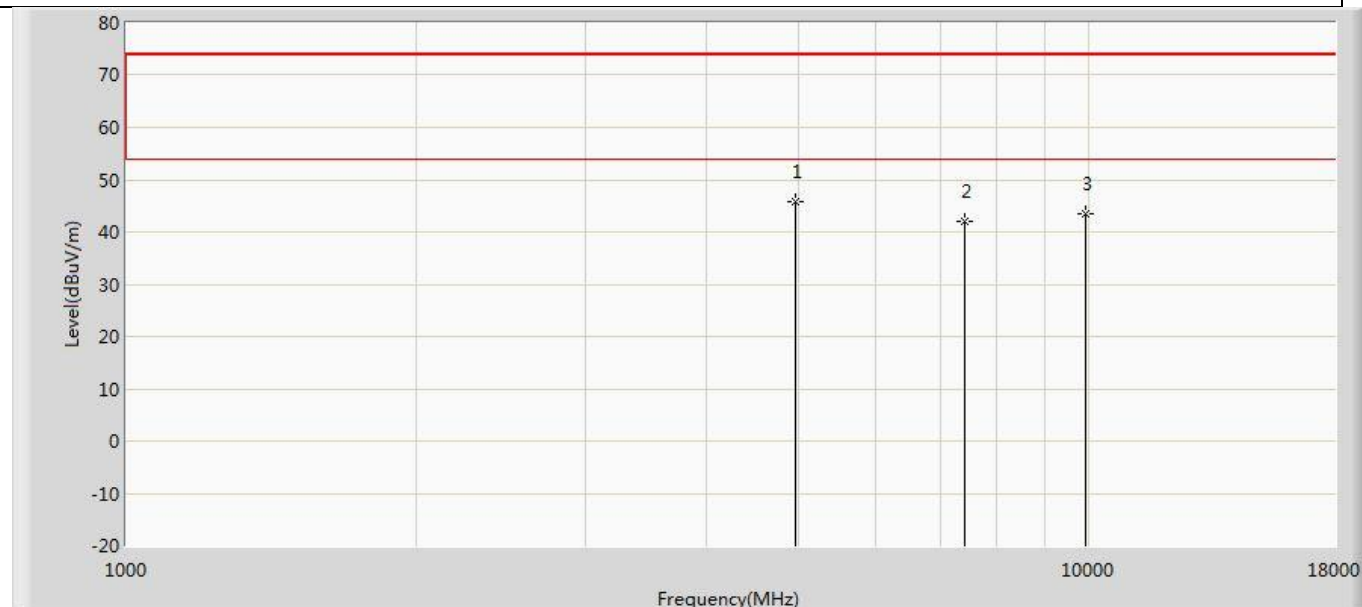
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4876.000	49.058	54.846	-24.942	74.000	-5.788	PK
2		7320.000	41.952	45.373	-32.048	74.000	-3.420	PK
3		9760.000	43.075	44.924	-30.925	74.000	-1.848	PK

Profile: 2290864R	Page No.: 47
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	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	45.206	50.797	-28.794	74.000	-5.591	PK
2		7440.000	42.407	45.573	-31.593	74.000	-3.166	PK
3		9920.000	42.897	44.588	-31.103	74.000	-1.690	PK

Profile: 2290864R	Page No.: 48
Engineer: RenZhang	
Site: AC5	Time: 2022/10/18 - 21:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



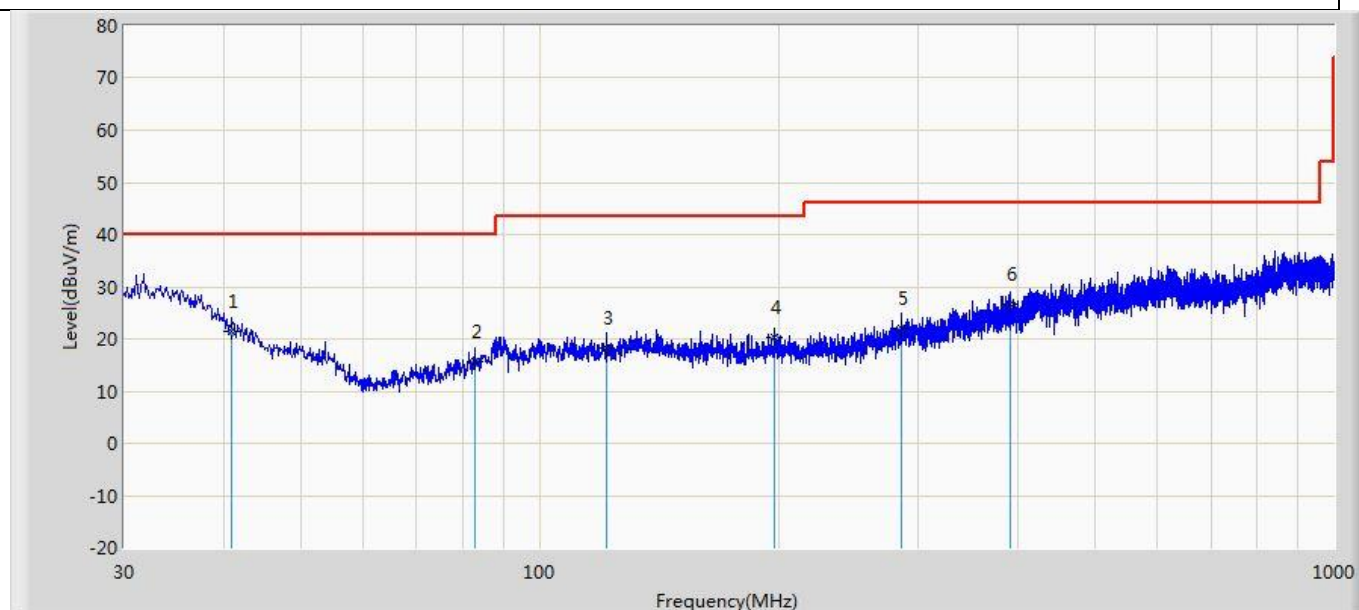
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4961.000	45.817	51.408	-28.183	74.000	-5.591	PK
2		7440.000	42.109	45.275	-31.891	74.000	-3.166	PK
3		9920.000	43.414	45.105	-30.586	74.000	-1.690	PK

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.

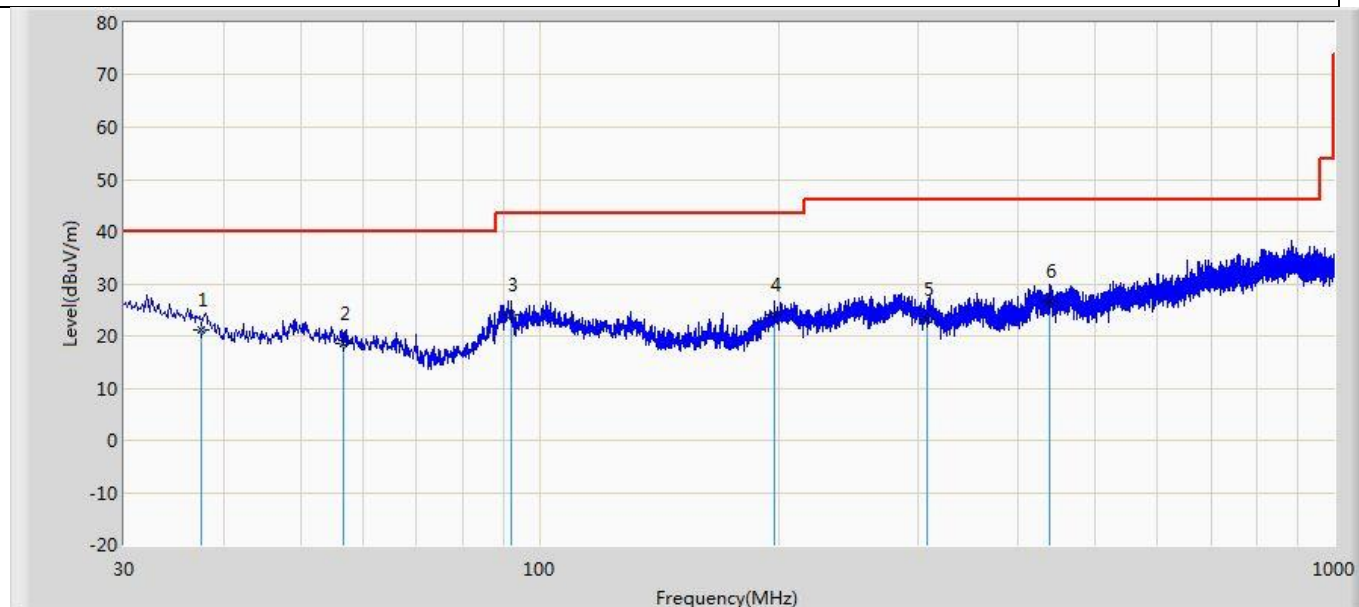
The worst case of Radiated Emission below 1GHz:

Profile: 2290864R	Page No.: 1
Engineer: RenZhang	
Site: AC3	Time: 2022/10/18 - 23:51
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Horizontal
EUT:Electronic fence transmitter	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	*	41.034	21.556	0.446	-18.444	40.000	21.110	QP
2		82.865	15.771	1.786	-24.229	40.000	13.985	QP
3		121.665	18.225	1.577	-25.275	43.500	16.649	QP
4		197.446	20.331	2.674	-23.169	43.500	17.657	QP
5		285.595	22.012	1.537	-23.988	46.000	20.474	QP
6		392.174	26.558	1.835	-19.442	46.000	24.723	QP

Profile: 2290864R	Page No.: 2
Engineer: RenZhang	
Site: AC3	Time: 2022/10/18 - 23:56
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Vertical
EUT:Electronic fence transmitter	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	*	37.518	21.224	0.435	-18.776	40.000	20.788	QP
2		56.614	18.445	1.445	-21.555	40.000	17.000	QP
3		92.201	24.123	6.034	-19.377	43.500	18.090	QP
4		197.568	24.118	1.258	-19.382	43.500	22.861	QP
5		307.299	23.045	-1.158	-22.955	46.000	24.203	QP
6		439.098	26.559	0.377	-19.441	46.000	26.182	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).

4.2 Emissions in non-restricted frequency band

VERDICT: PASS

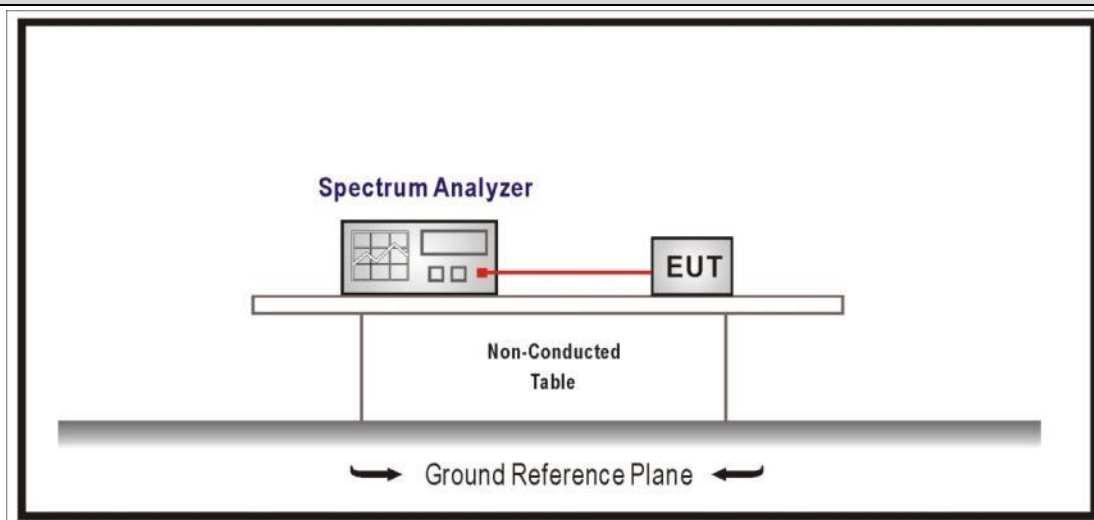
4.2.1 Limit

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

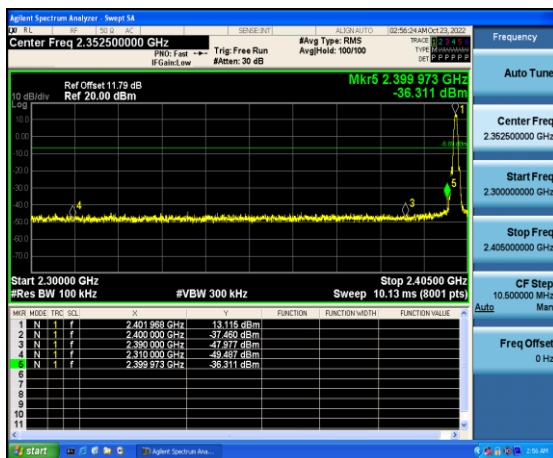


4.2.3 Test Procedure

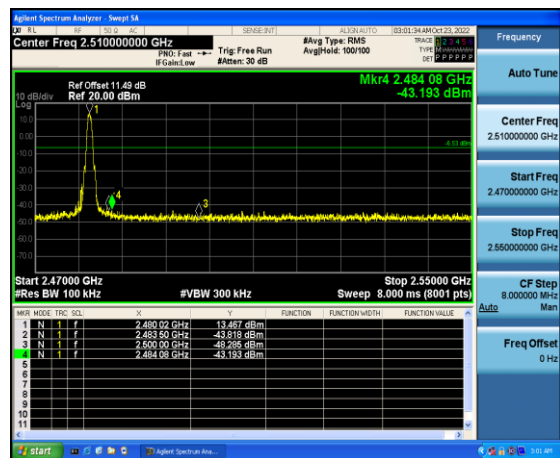
References Rule	Chapter	Description
☒ ANSI C63.10	11.11	Emissions in non-restricted frequency bands
☒ ANSI C63.10	11.11.1	General
☒ ANSI C63.10	11.11.2	Reference level measurement
☒ ANSI C63.10	11.11.3	Emission level measurement

4.2.4 Test Data

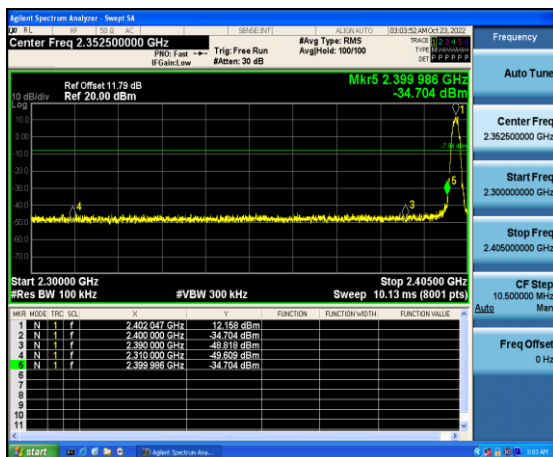
Mode 1 CH00 (2402MHz)



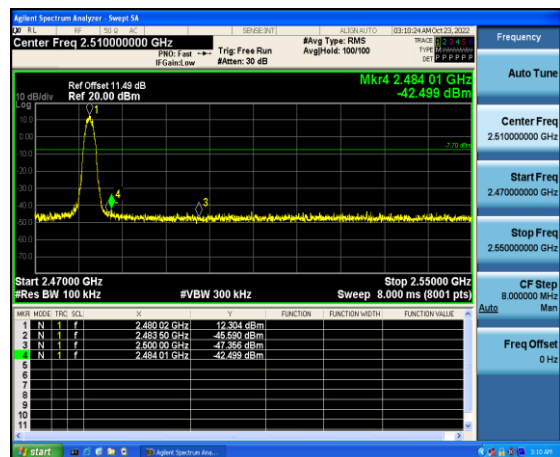
Mode 1 CH39 (2480MHz)



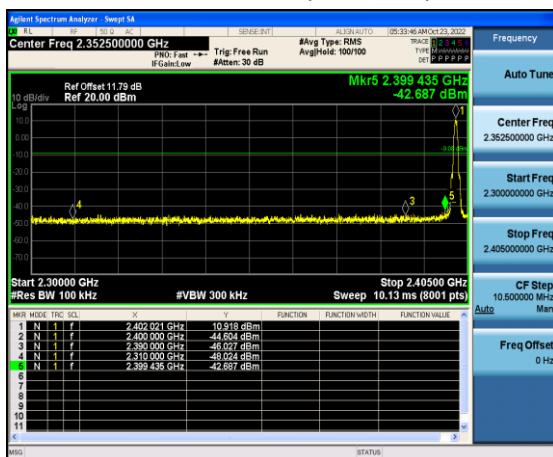
Mode 2 CH00 (2402MHz)



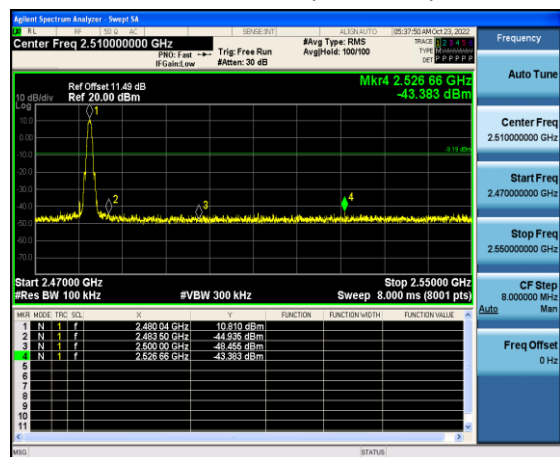
Mode 2 CH39 (2480MHz)



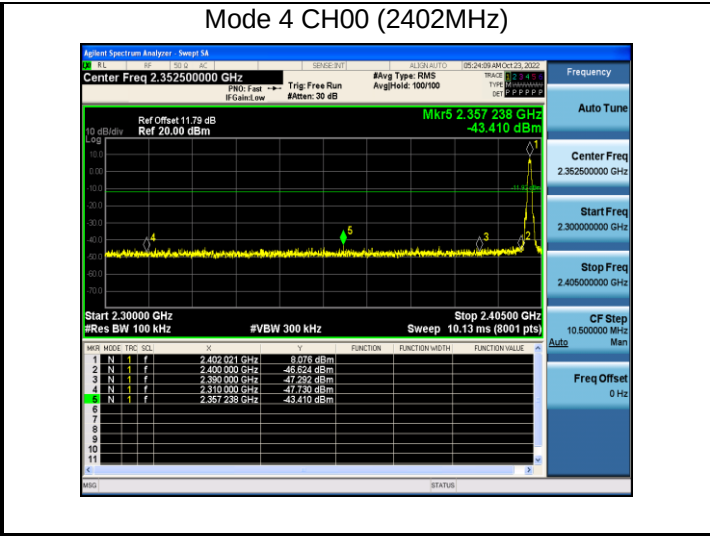
Mode 3 CH00 (2402MHz)



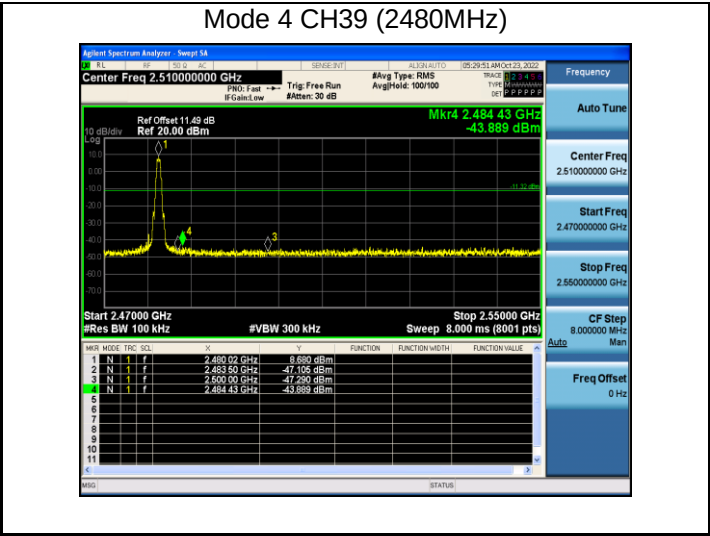
Mode 3 CH39 (2480MHz)



Mode 4 CH00 (2402MHz)

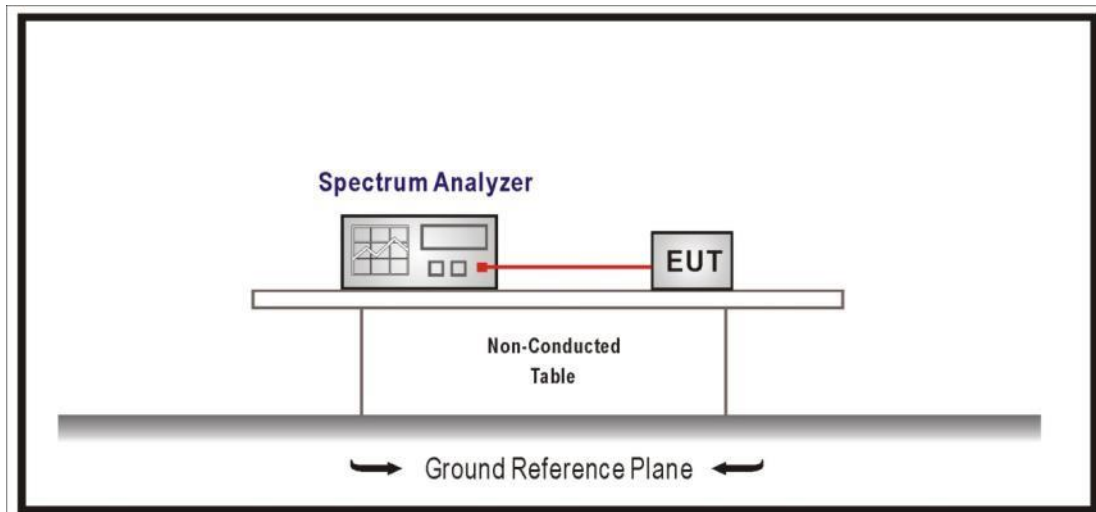


Mode 4 CH39 (2480MHz)



4.3 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

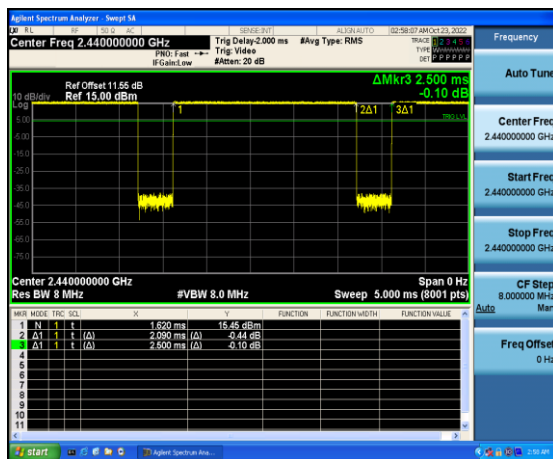
4.3.4 Test Data

Test Mode	Tx On (us)	Tx On + Tx Off (us)	VBW (kHz)	Duty Cycle (%)	Detector
Mode 1	2.09	2.50	8000	83.60	RMS
Mode 2	1.06	1.88	3000	56.38	RMS
Mode 3	4.48	5.00	3000	89.60	RMS
Mode 4	15.47	15.47	3000	100.00	RMS

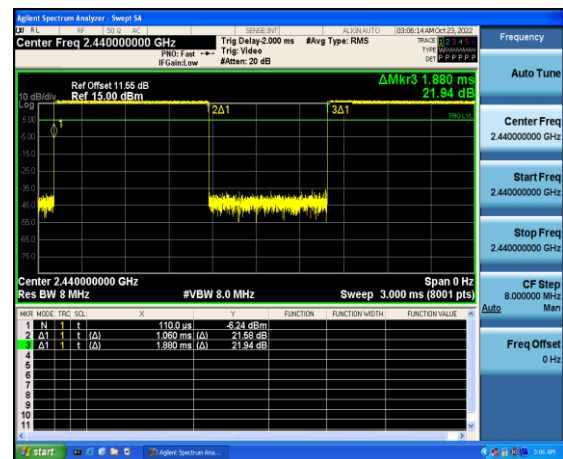
Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

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.

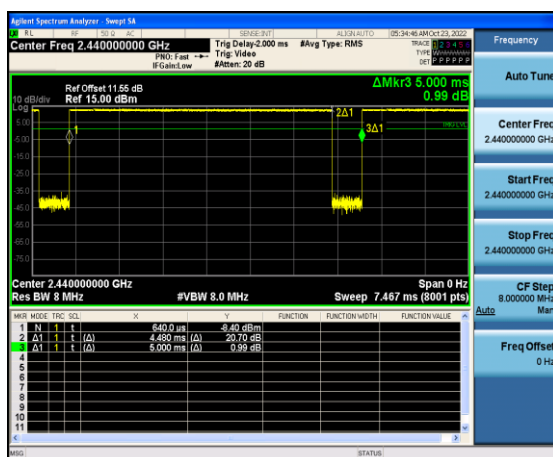
Mode 1 CH19 2440MHz



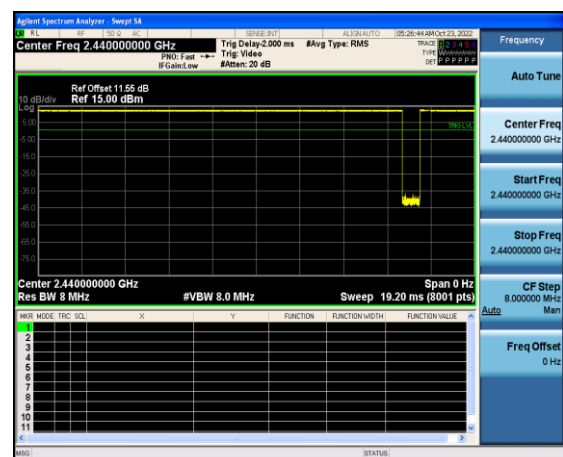
Mode 2 CH19 2440MHz



Mode 3 CH19 2440MHz



Mode 4 CH19 2440MHz



4.4 Band Edge

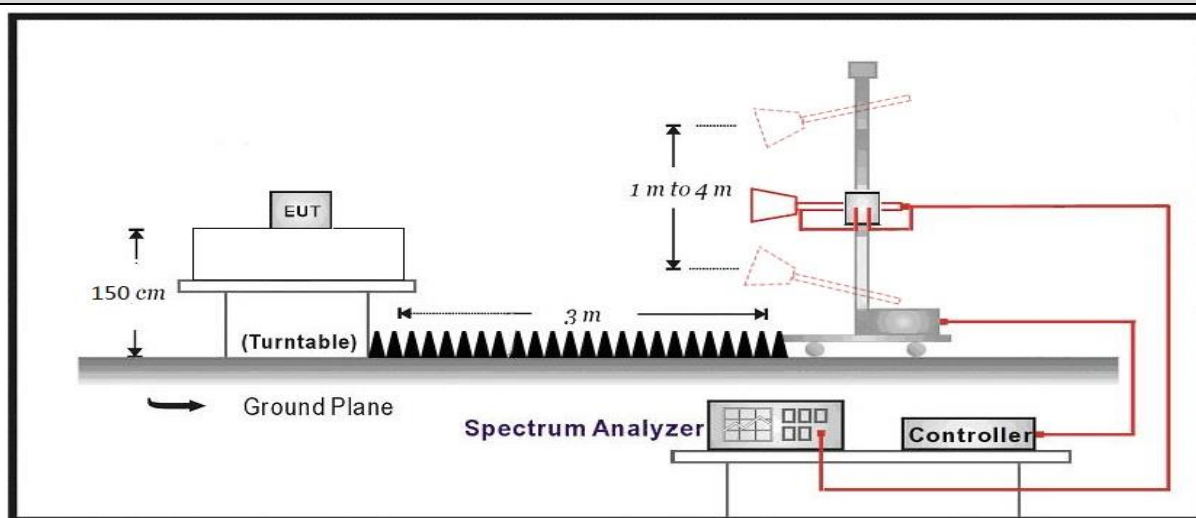
VERDICT: PASS

4.4.1 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.

4.4.2 Test Setup

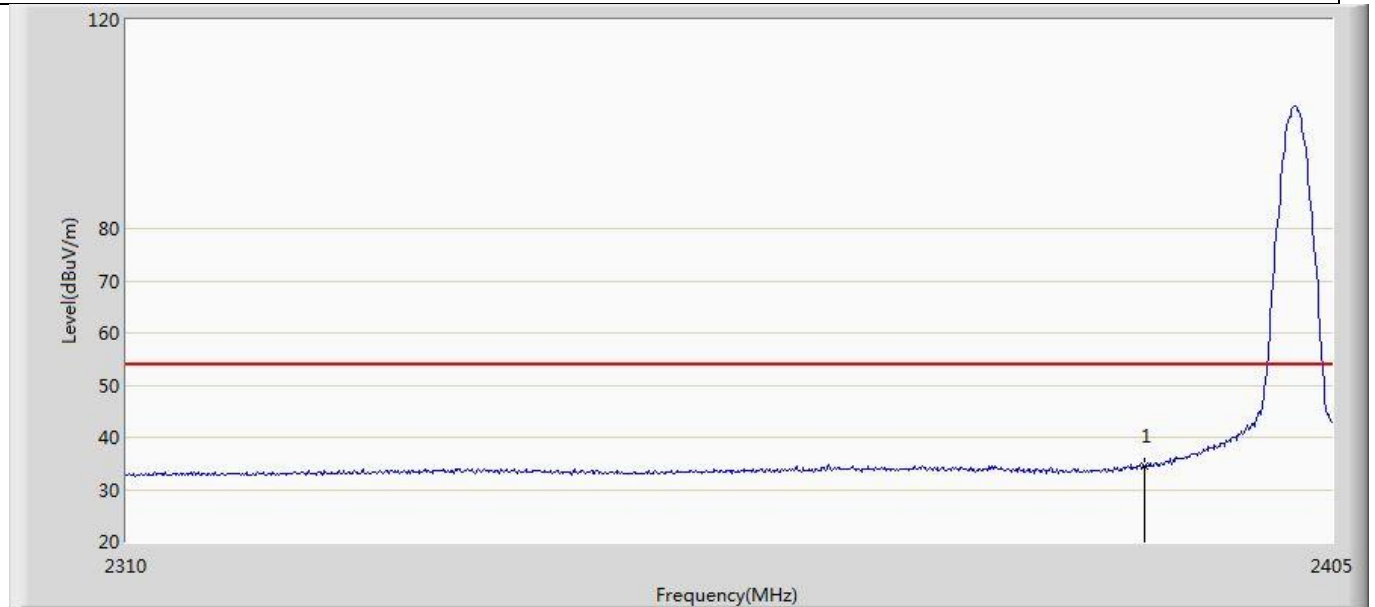


4.4.3 Test Procedure

	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	11.12.2	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

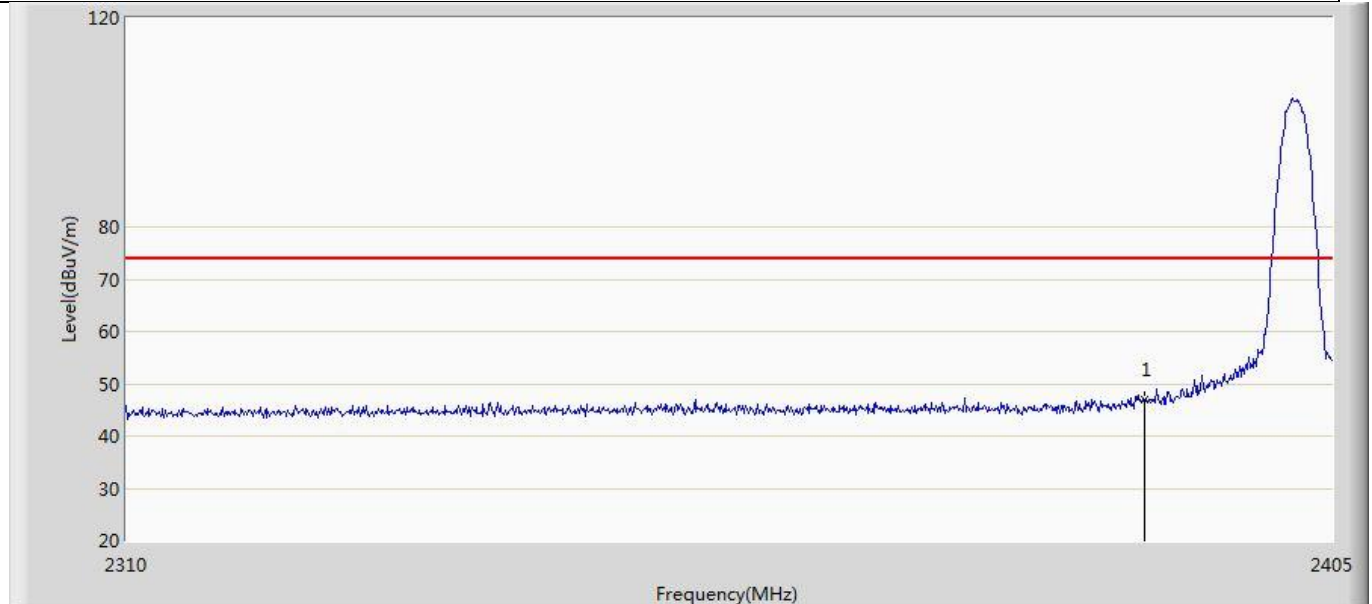
4.4.4 Test Data

Profile: 2290864R	Page No.: 1
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



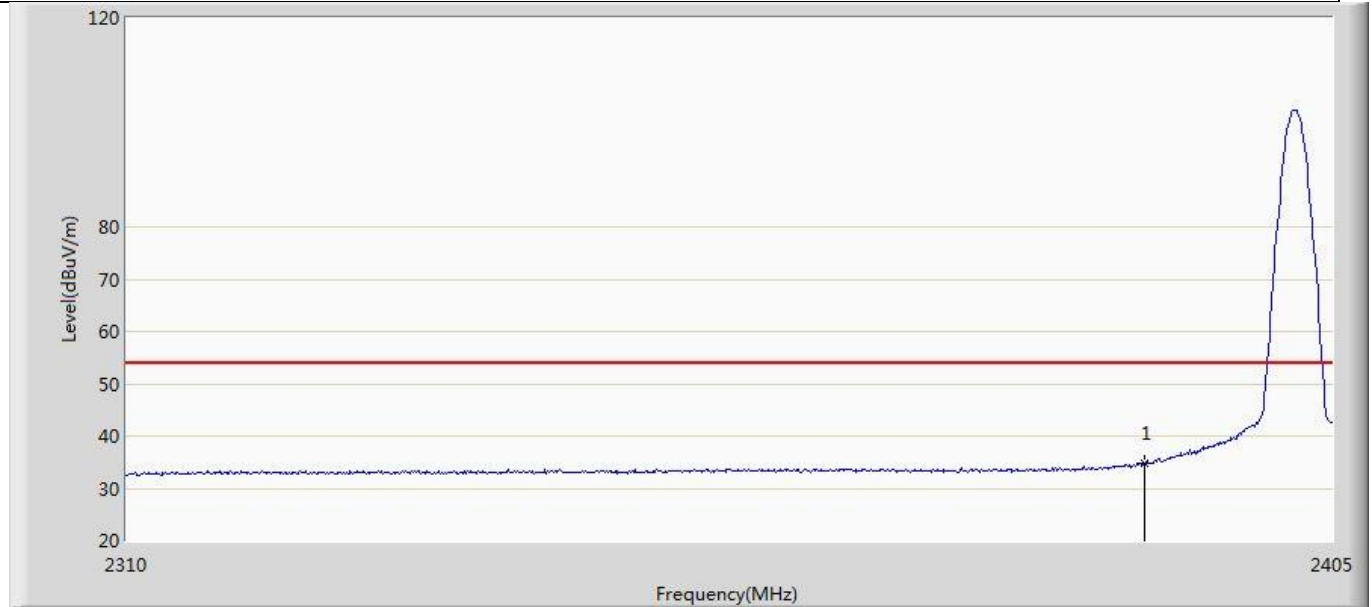
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.599	0.594	-19.401	54.000	34.005	AV

Profile: 2290864R	Page No.: 2
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



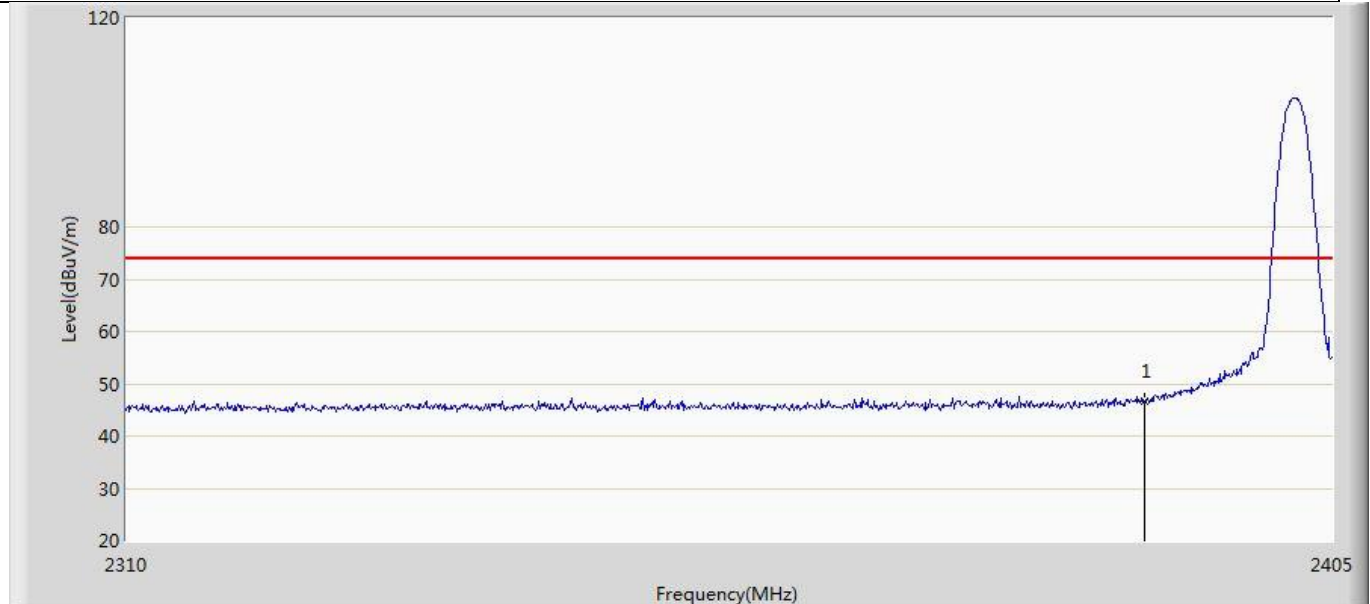
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.912	12.907	-27.088	74.000	34.005	PK

Profile: 2290864R	Page No.: 3
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



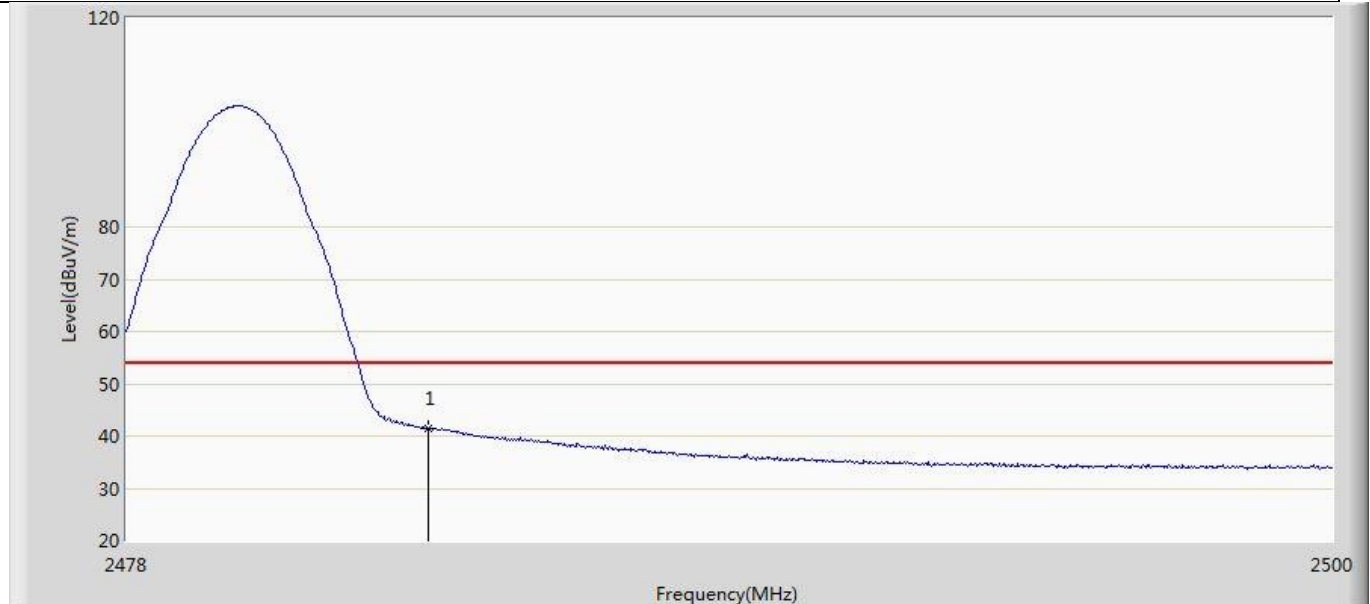
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.860	0.855	-19.140	54.000	34.005	AV

Profile: 2290864R	Page No.: 4
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2402MHz by LE_1Mbps	



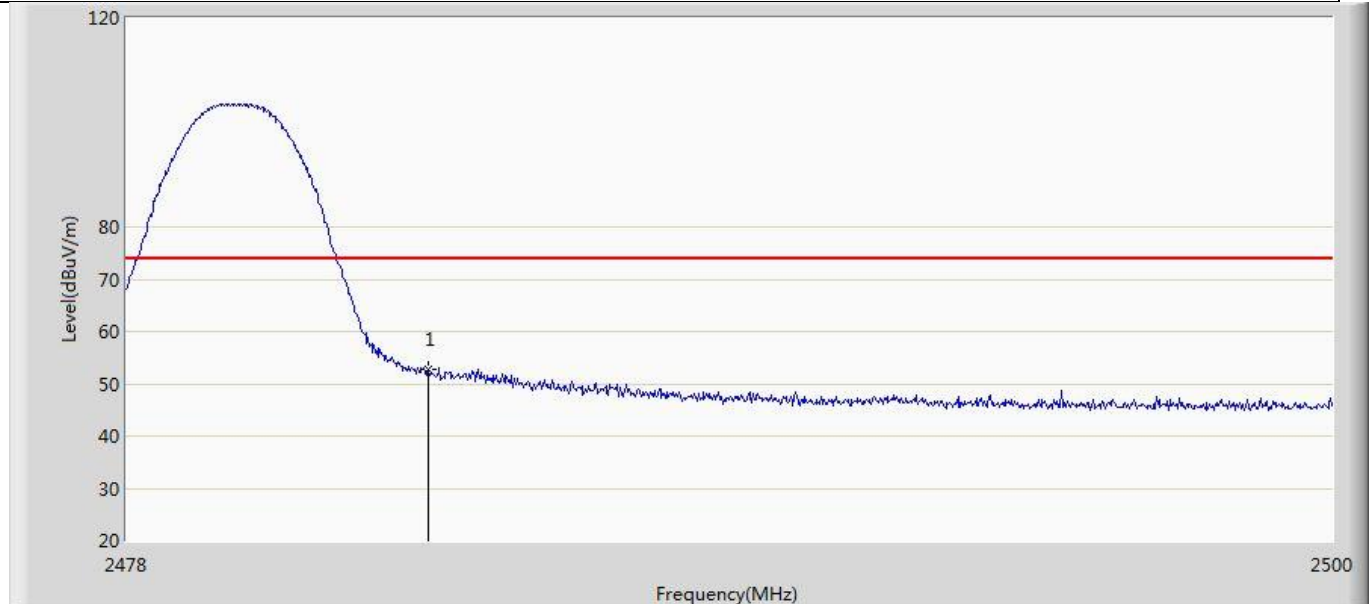
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.531	12.526	-27.469	74.000	34.005	PK

Profile: 2290864R	Page No.: 5
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:37
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



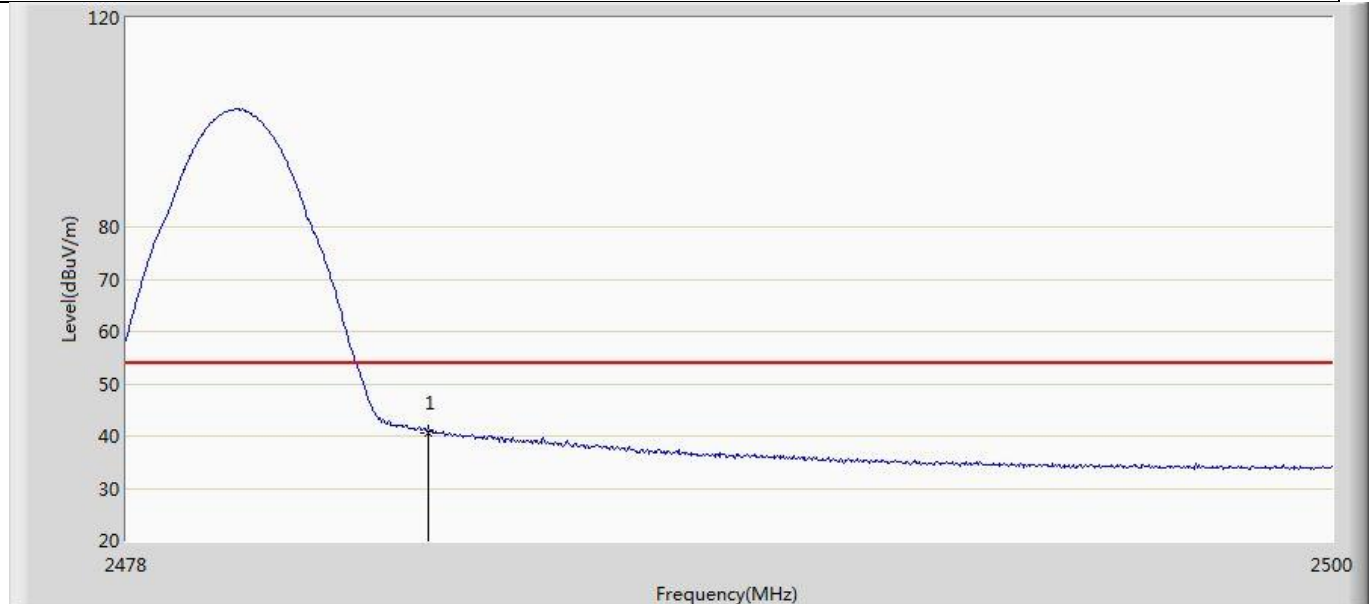
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	41.463	7.242	-12.537	54.000	34.221	AV

Profile: 2290864R	Page No.: 6
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



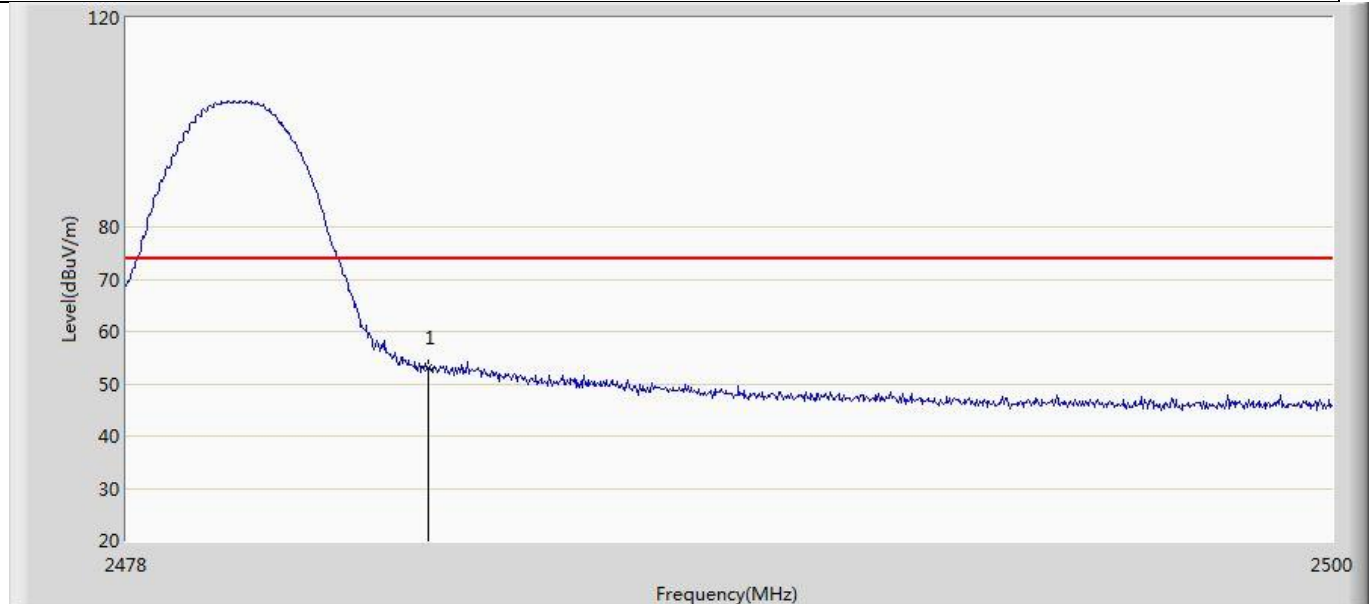
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.675	18.454	-21.325	74.000	34.221	PK

Profile: 2290864R	Page No.: 7
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



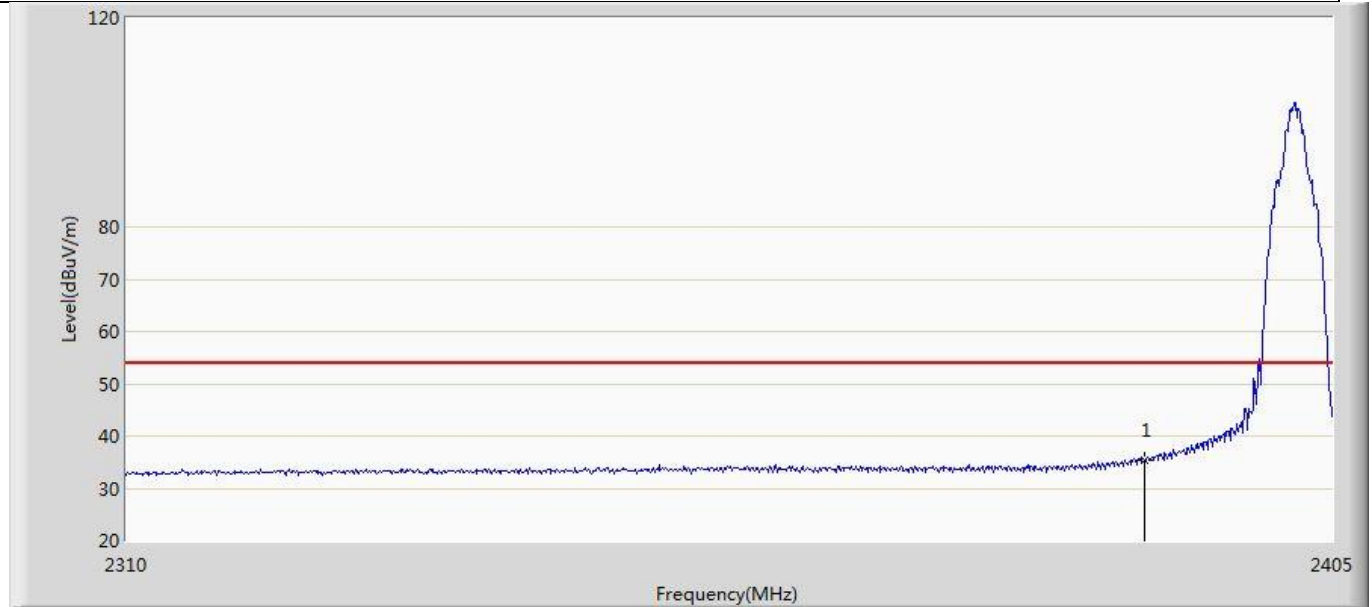
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.664	6.443	-13.336	54.000	34.221	AV

Profile: 2290864R	Page No.: 8
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:41
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 1: Transmit at 2480MHz by LE_1Mbps	



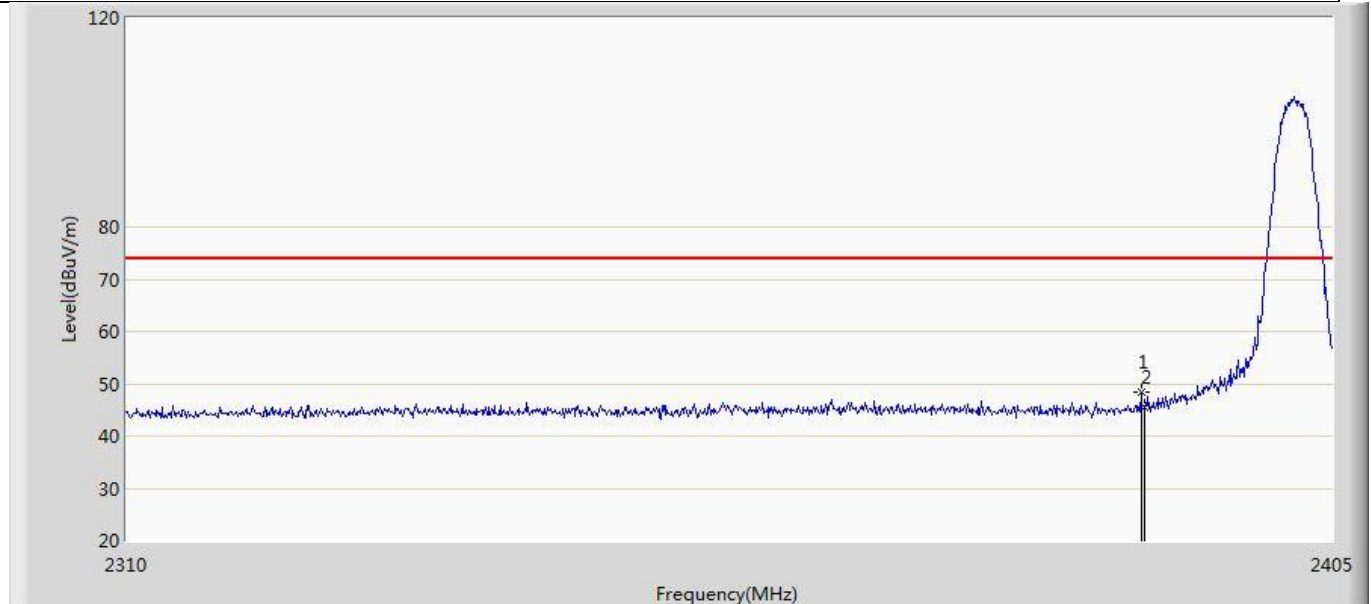
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.089	18.868	-20.911	74.000	34.221	PK

Profile: 2290864R	Page No.: 9
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:44
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



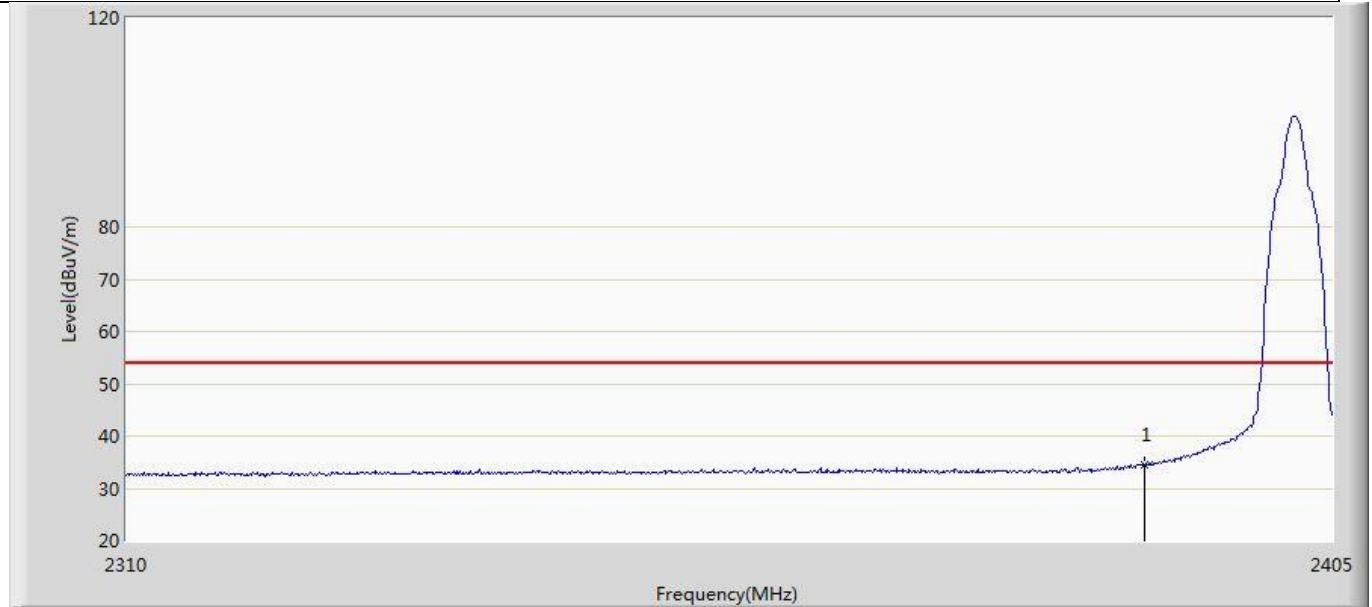
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	35.355	1.350	-18.645	54.000	34.005	AV

Profile: 2290864R	Page No.: 10
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



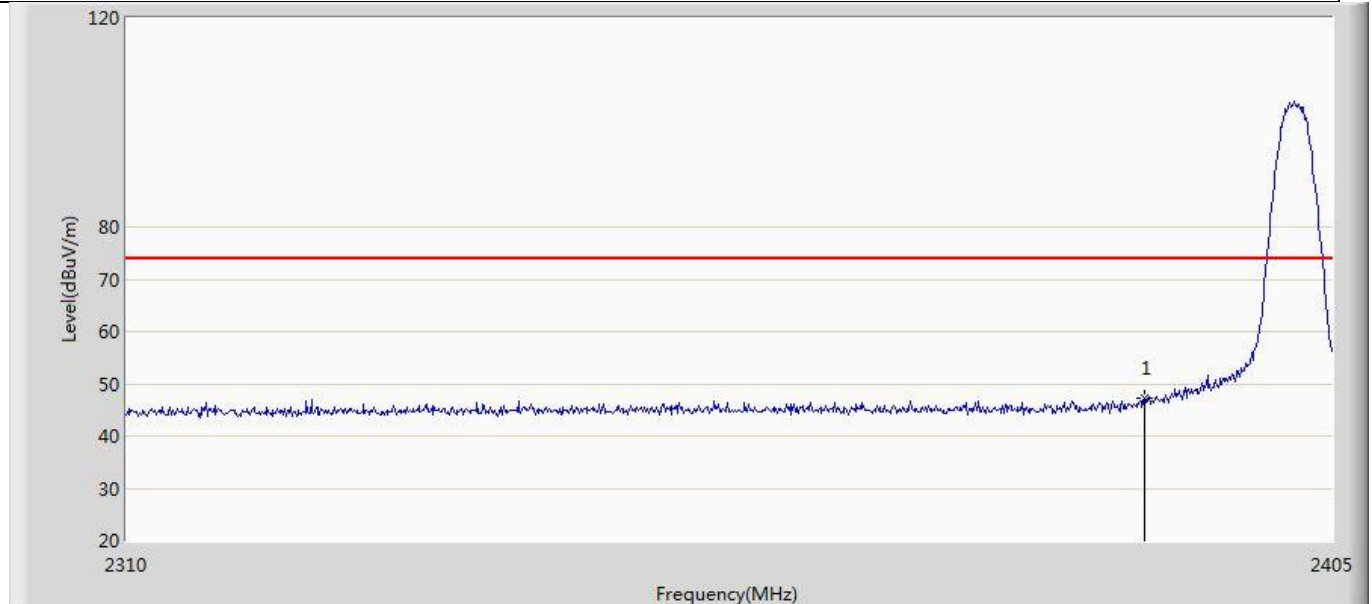
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2389.705	48.305	14.301	-25.695	74.000	34.003	PK
2		2390.000	45.575	11.570	-28.425	74.000	34.005	PK

Profile: 2290864R	Page No.: 11
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



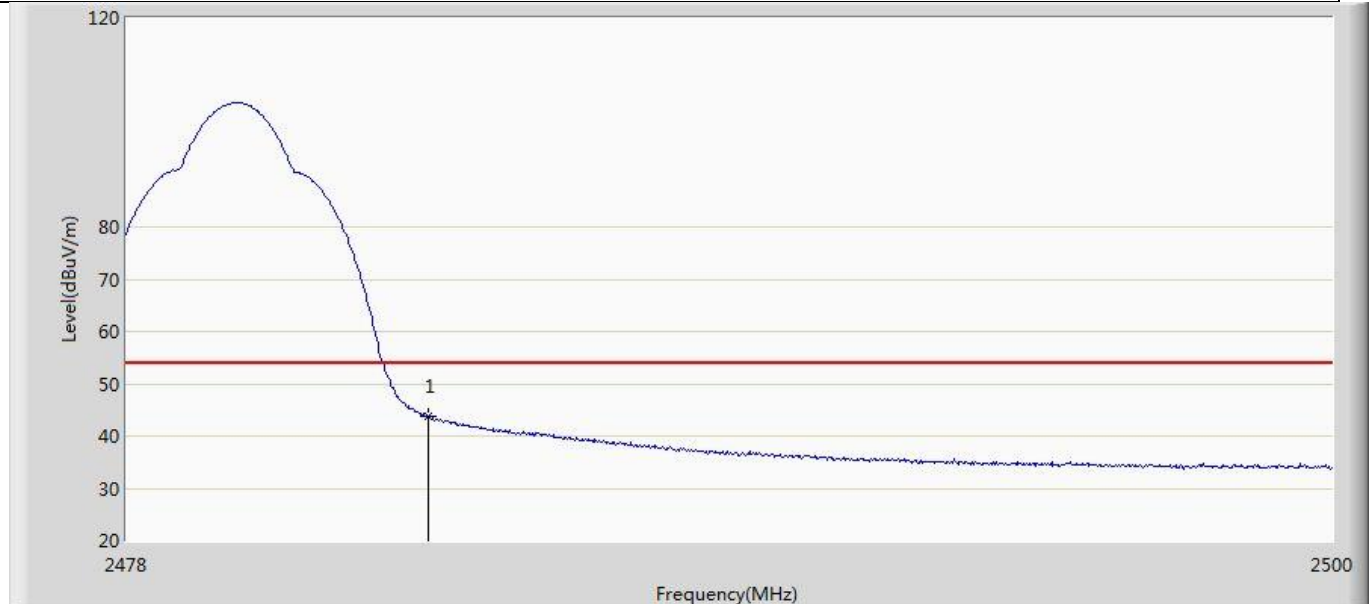
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.596	0.591	-19.404	54.000	34.005	AV

Profile: 2290864R	Page No.: 12
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2402MHz by LE_2Mbps	



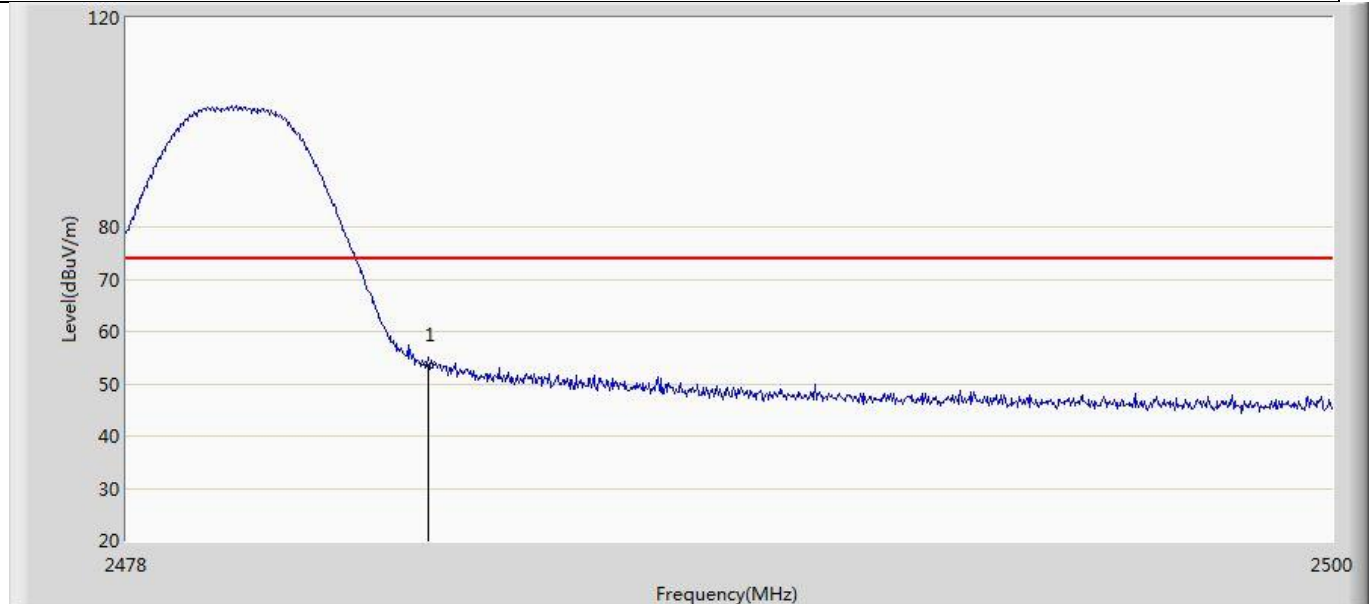
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.159	13.154	-26.841	74.000	34.005	PK

Profile: 2290864R	Page No.: 13
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



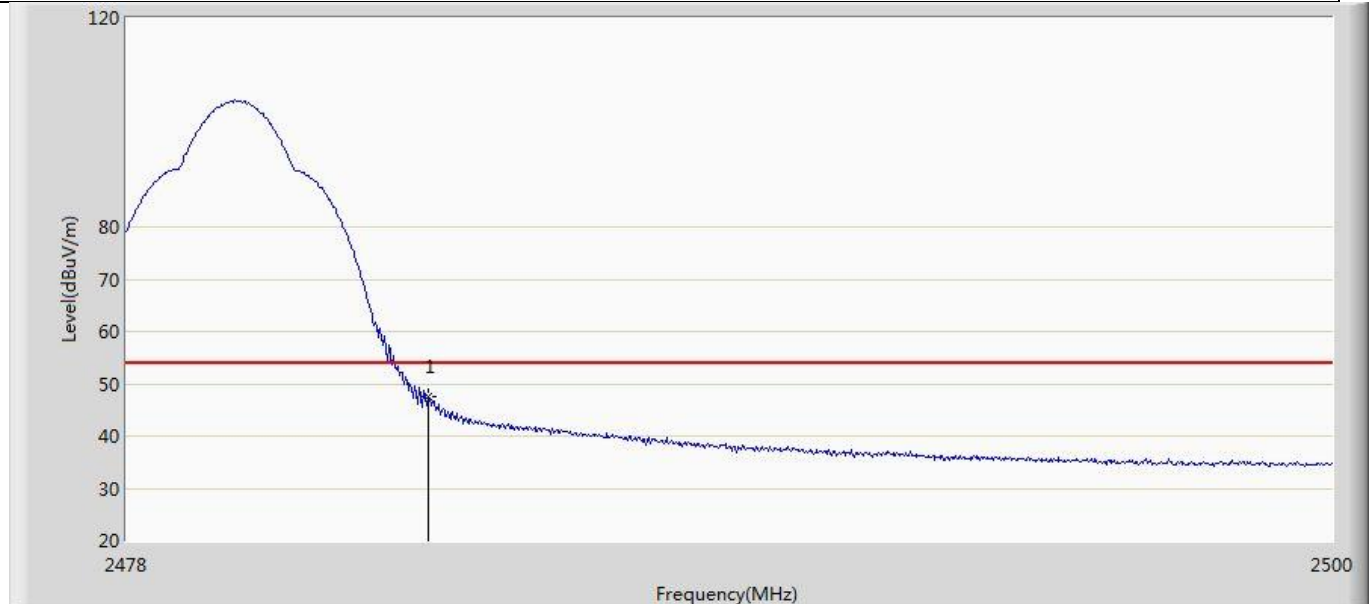
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	43.728	9.507	-10.272	54.000	34.221	AV

Profile: 2290864R	Page No.: 14
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



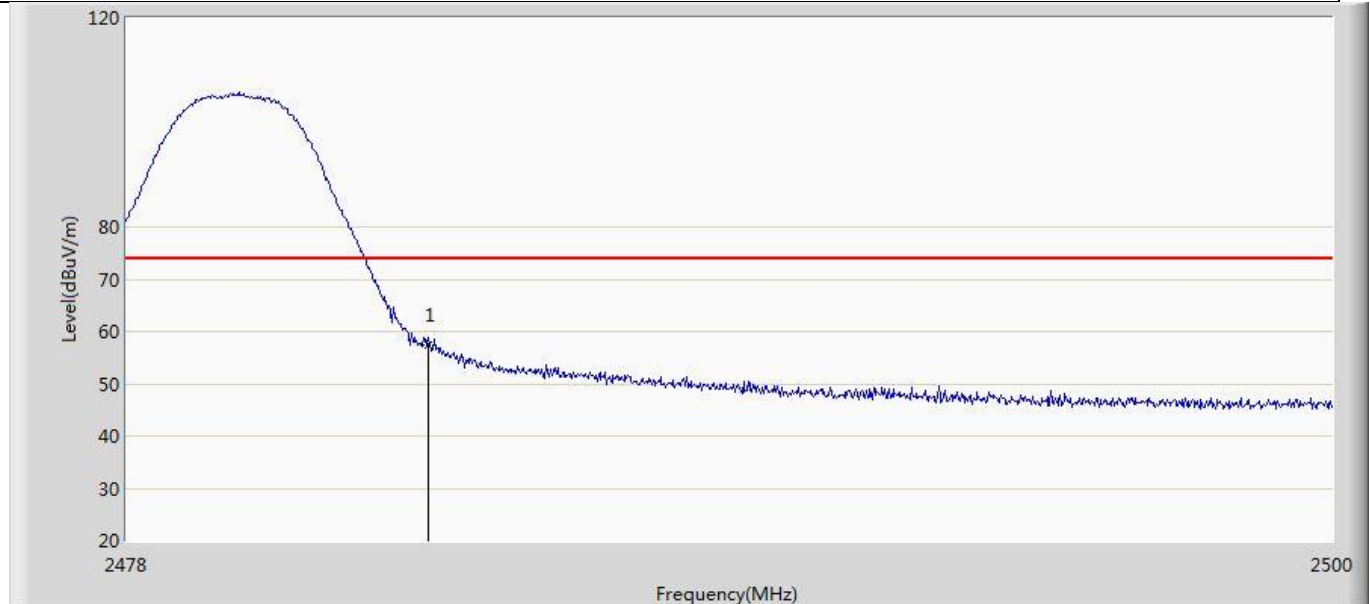
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.535	19.314	-20.465	74.000	34.221	PK

Profile: 2290864R	Page No.: 15
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



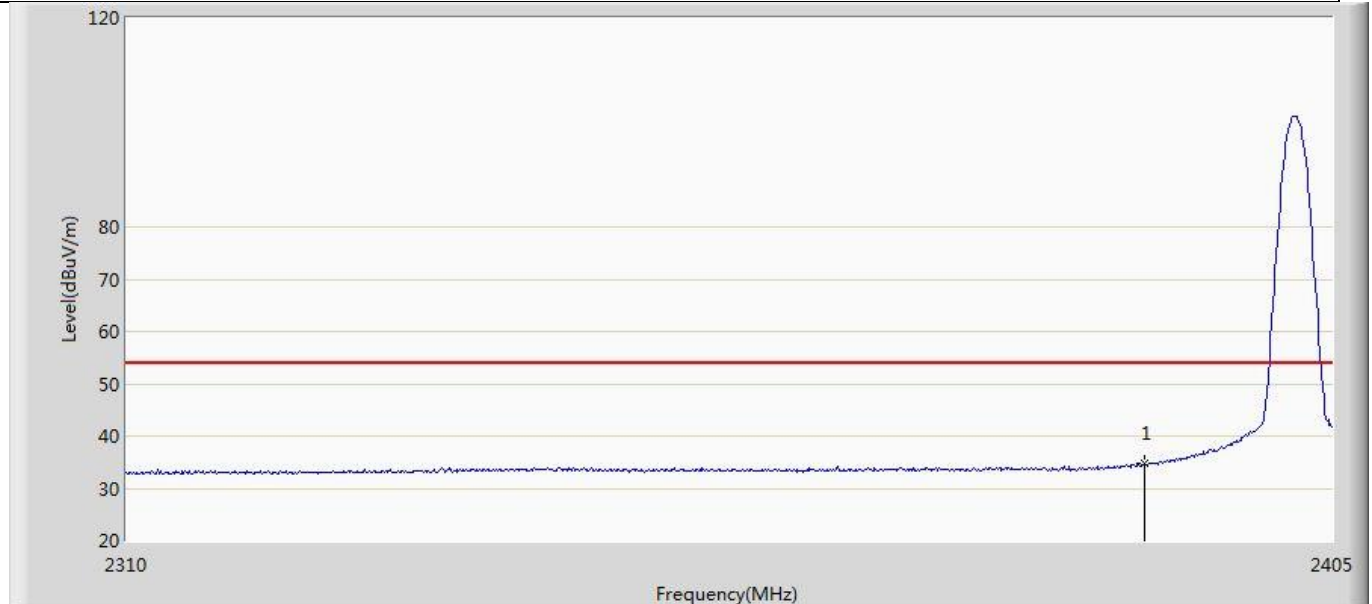
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	47.580	13.359	-6.420	54.000	34.221	AV

Profile: 2290864R	Page No.: 16
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 22:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 2: Transmit at 2480MHz by LE_2Mbps	



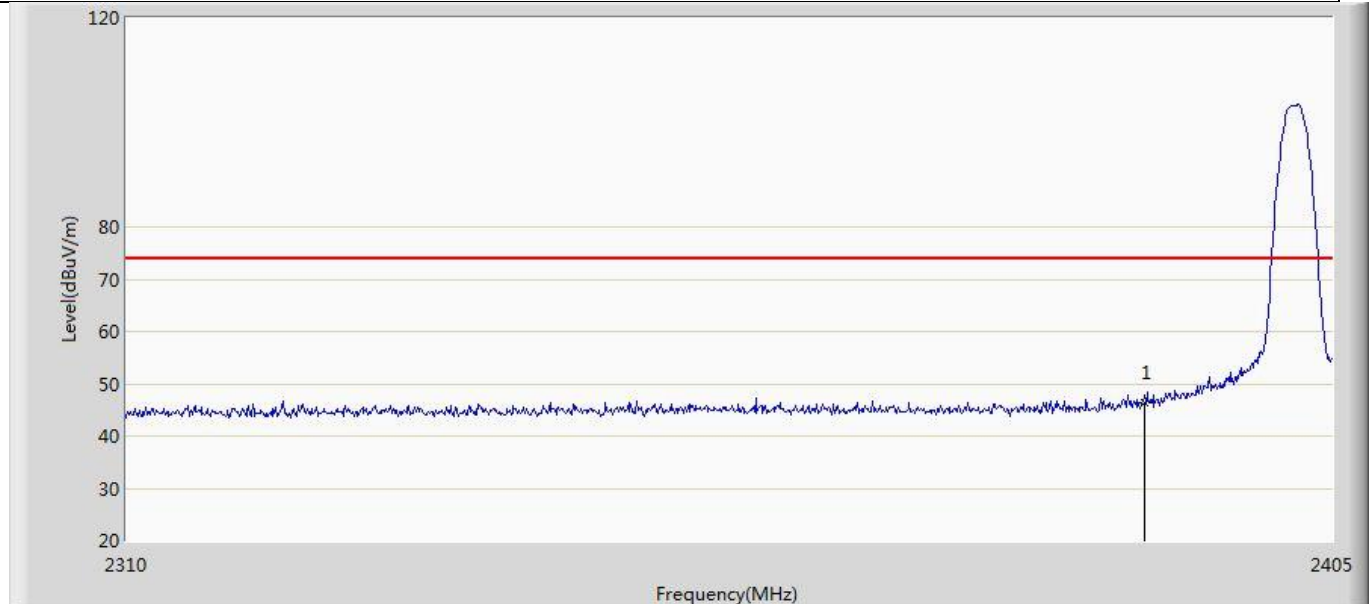
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.528	23.307	-16.472	74.000	34.221	PK

Profile: 2290864R	Page No.: 17
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



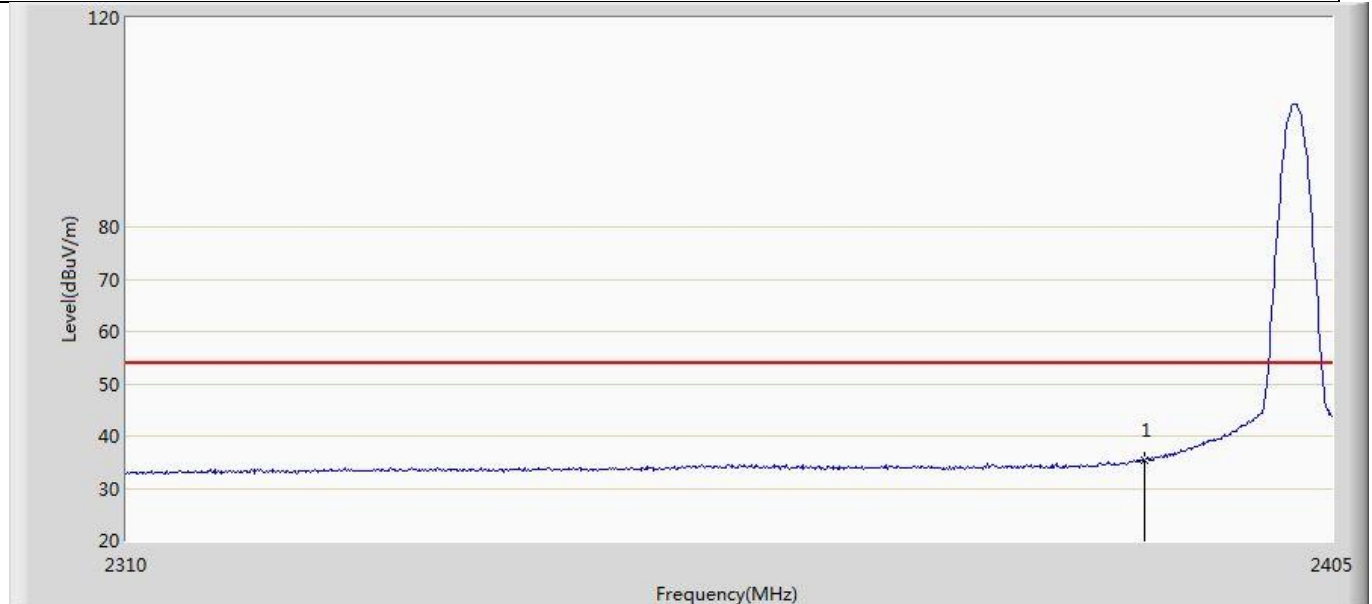
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.872	0.867	-19.128	54.000	34.005	AV

Profile: 2290864R	Page No.: 18
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



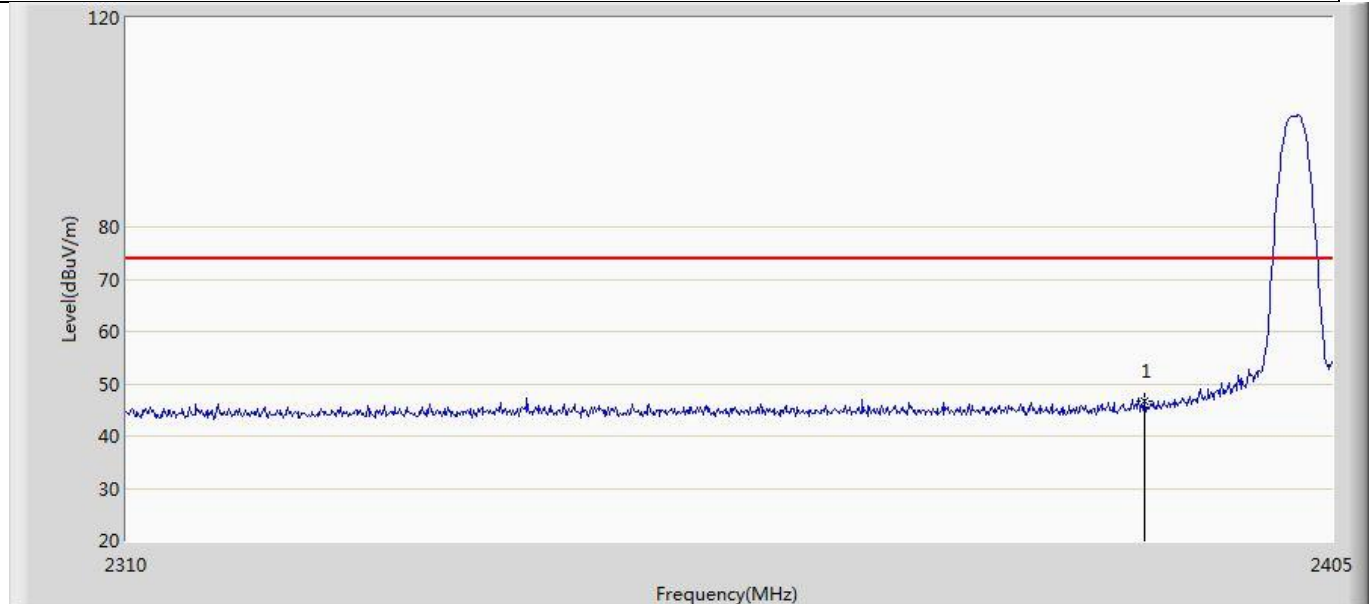
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.409	12.404	-27.591	74.000	34.005	PK

Profile: 2290864R	Page No.: 19
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



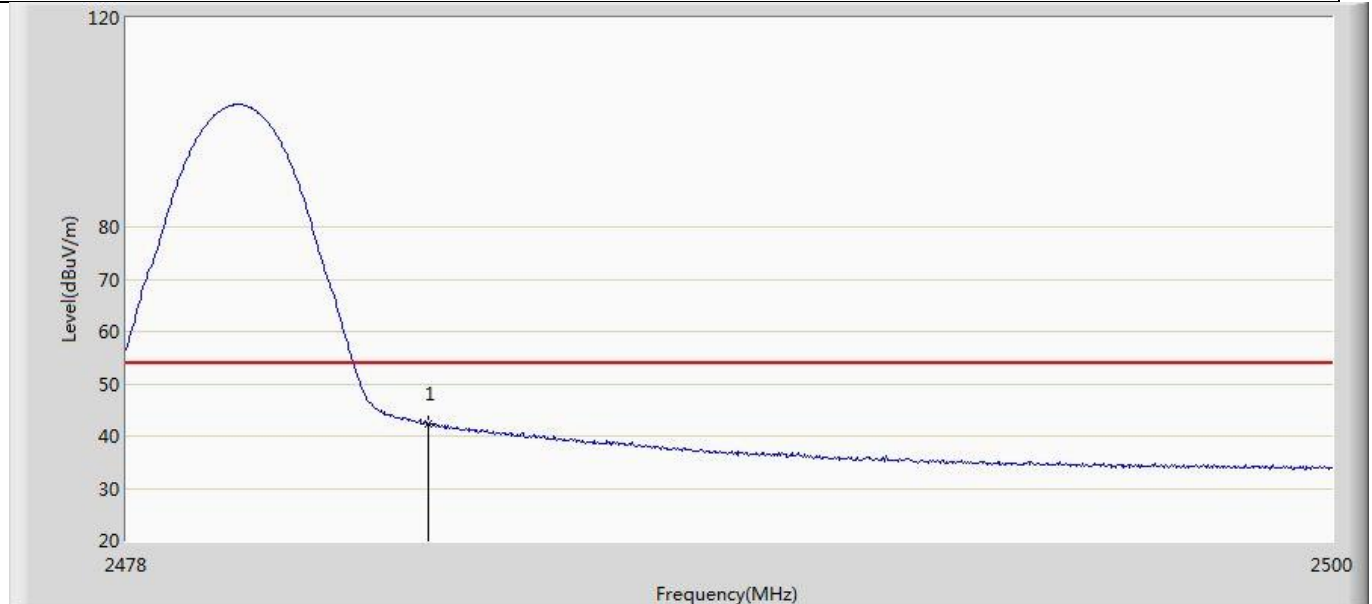
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	35.494	1.489	-18.506	54.000	34.005	AV

Profile: 2290864R	Page No.: 20
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2402MHz by LE_Coded S=8	



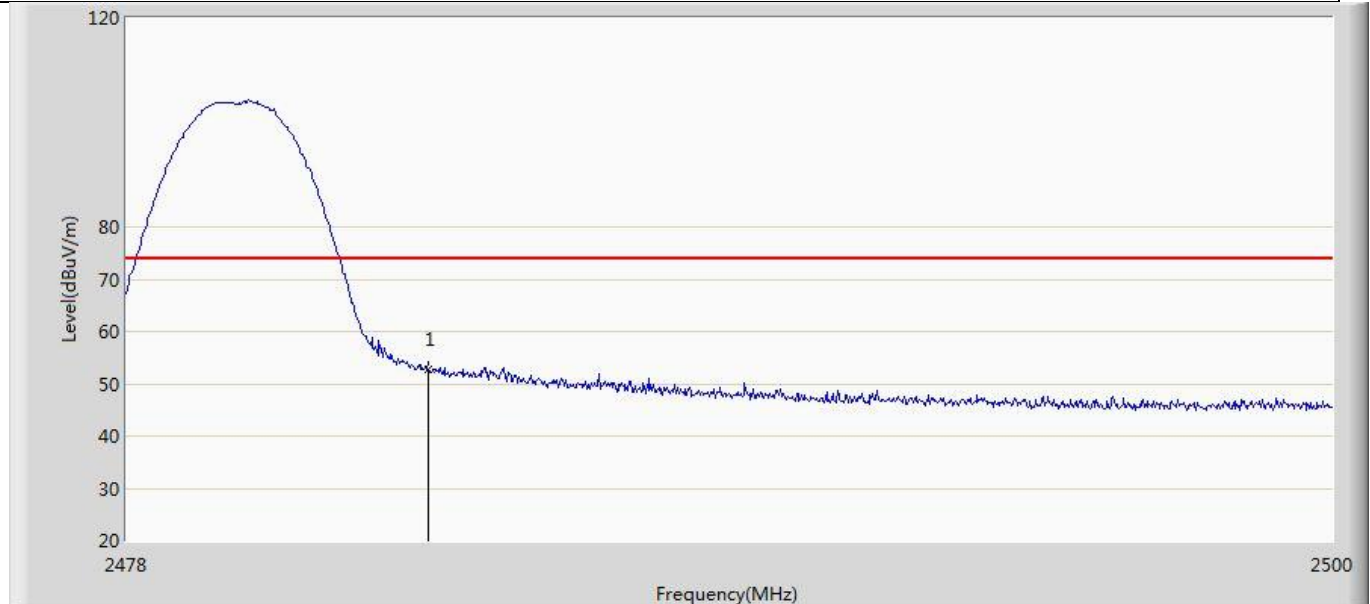
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.617	12.612	-27.383	74.000	34.005	PK

Profile: 2290864R	Page No.: 21
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



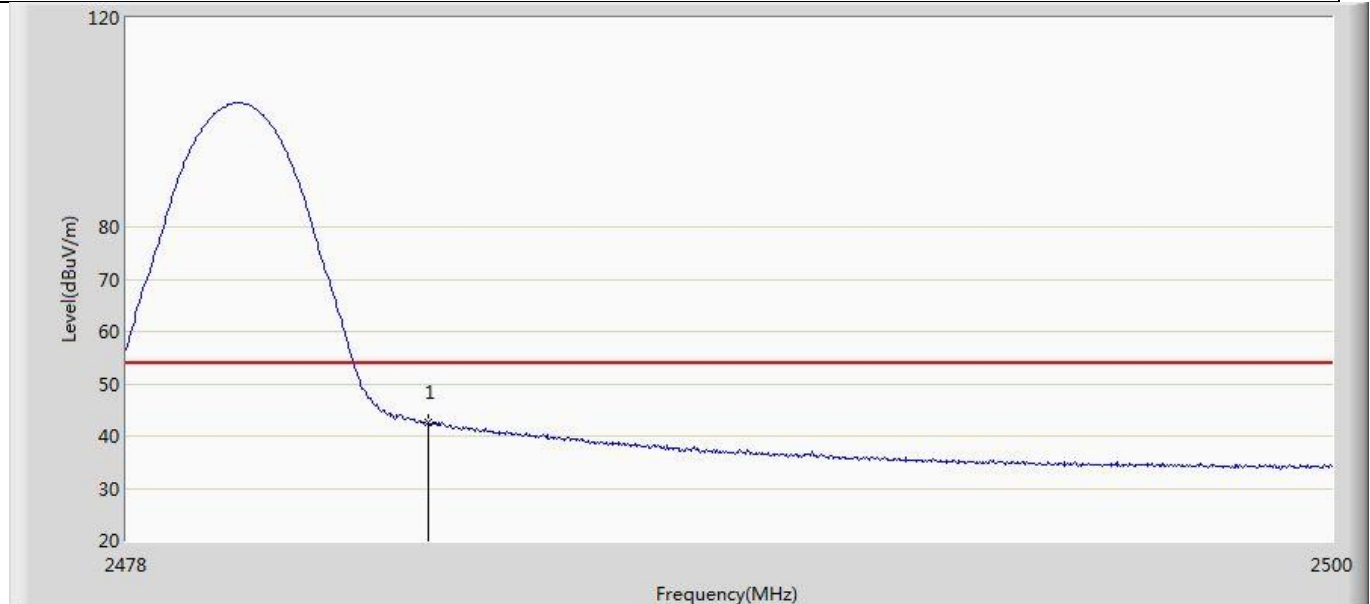
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	42.203	7.982	-11.797	54.000	34.221	AV

Profile: 2290864R	Page No.: 22
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



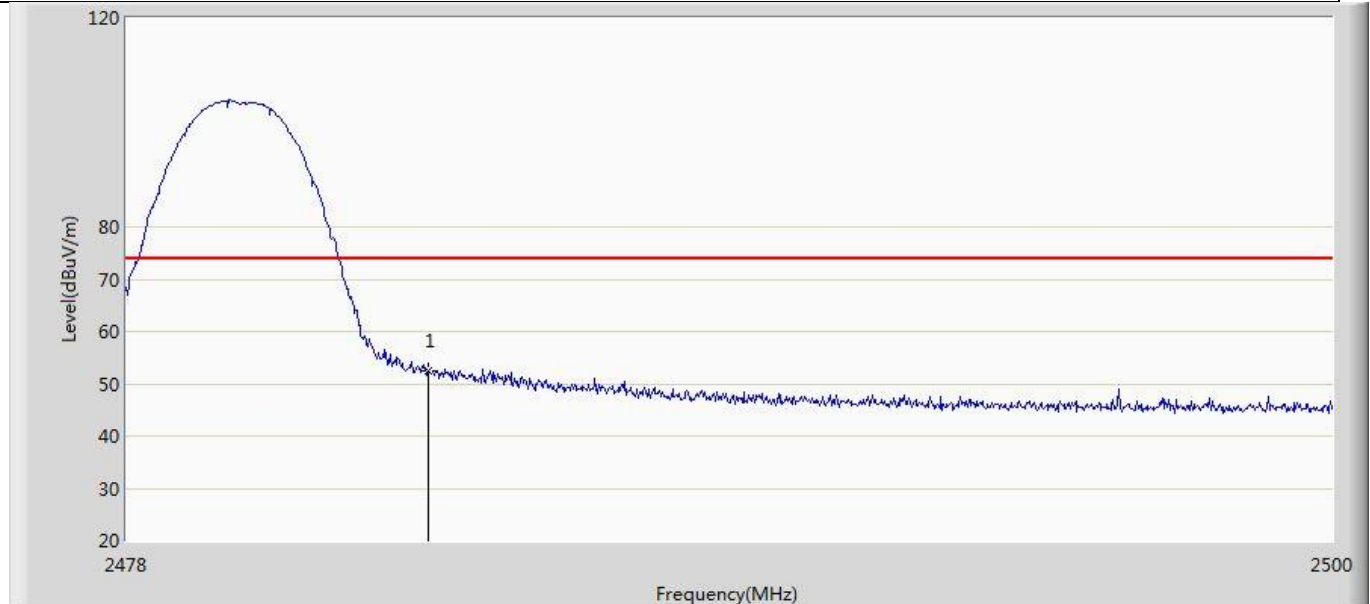
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.826	18.605	-21.174	74.000	34.221	PK

Profile: 2290864R	Page No.: 23
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



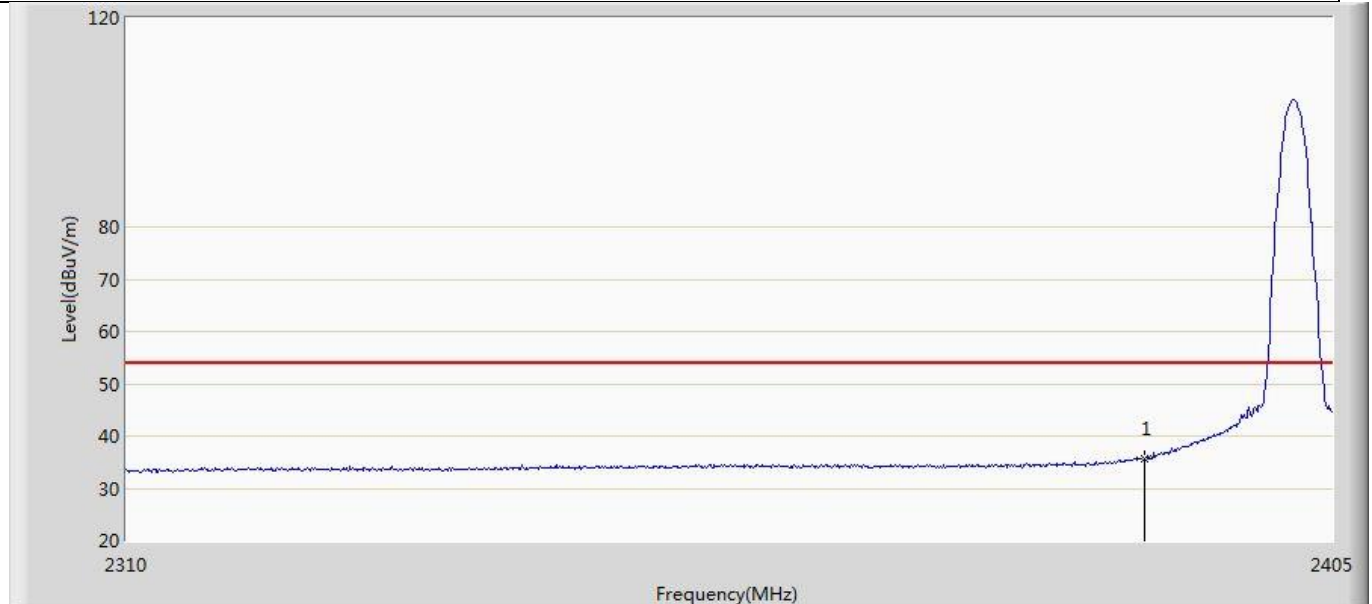
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	42.650	8.429	-11.350	54.000	34.221	AV

Profile: 2290864R	Page No.: 24
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT:Electronic fence transmitter	Power: DC 12V
Note: Mode 3: Transmit at 2480MHz by LE_Coded S=8	



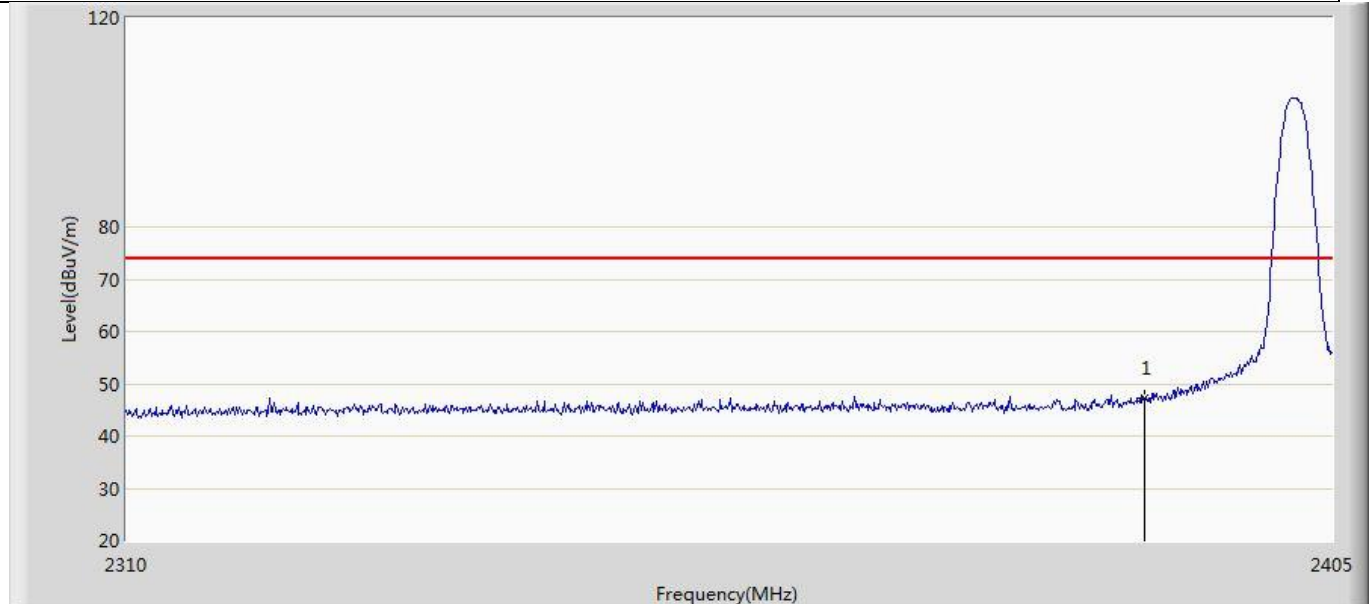
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.595	18.374	-21.405	74.000	34.221	PK

Profile: 2290864R	Page No.: 25
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



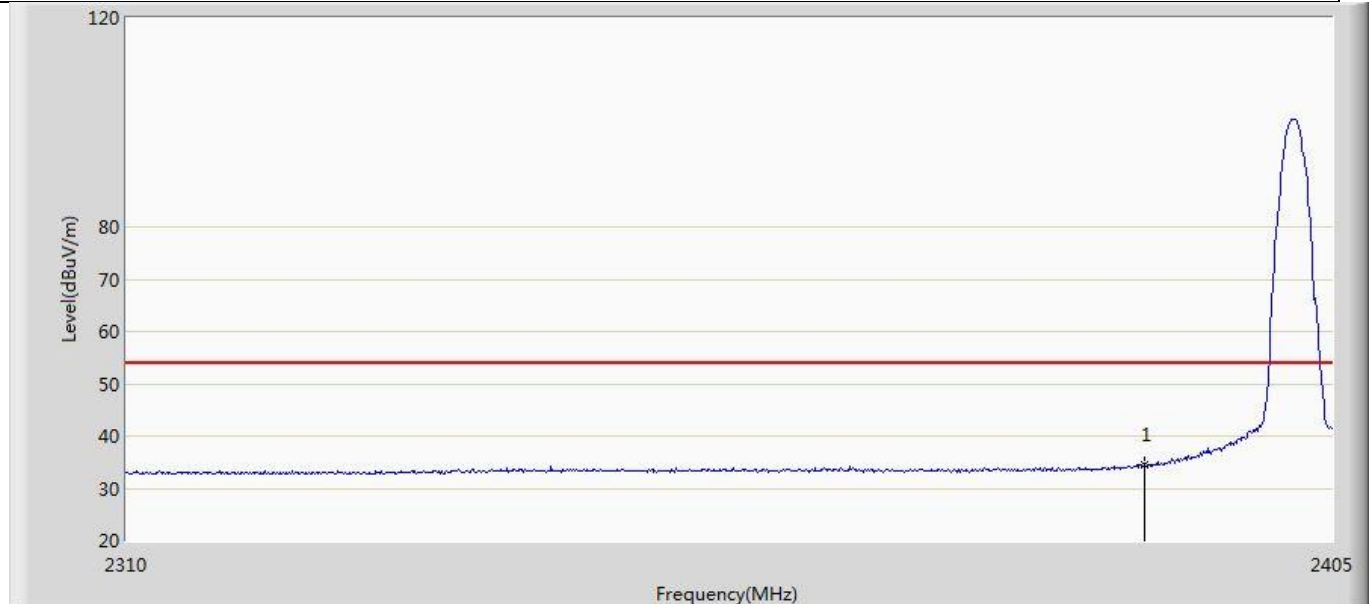
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	35.642	1.637	-18.358	54.000	34.005	AV

Profile: 2290864R	Page No.: 26
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



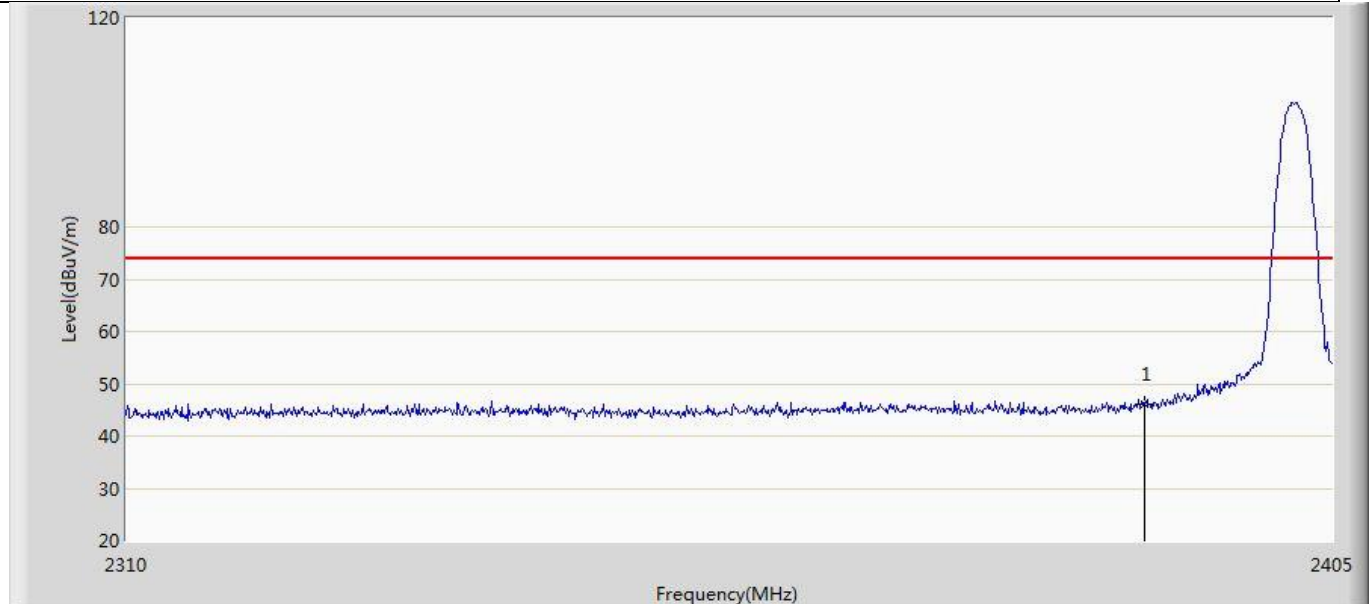
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	47.269	13.264	-26.731	74.000	34.005	PK

Profile: 2290864R	Page No.: 27
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



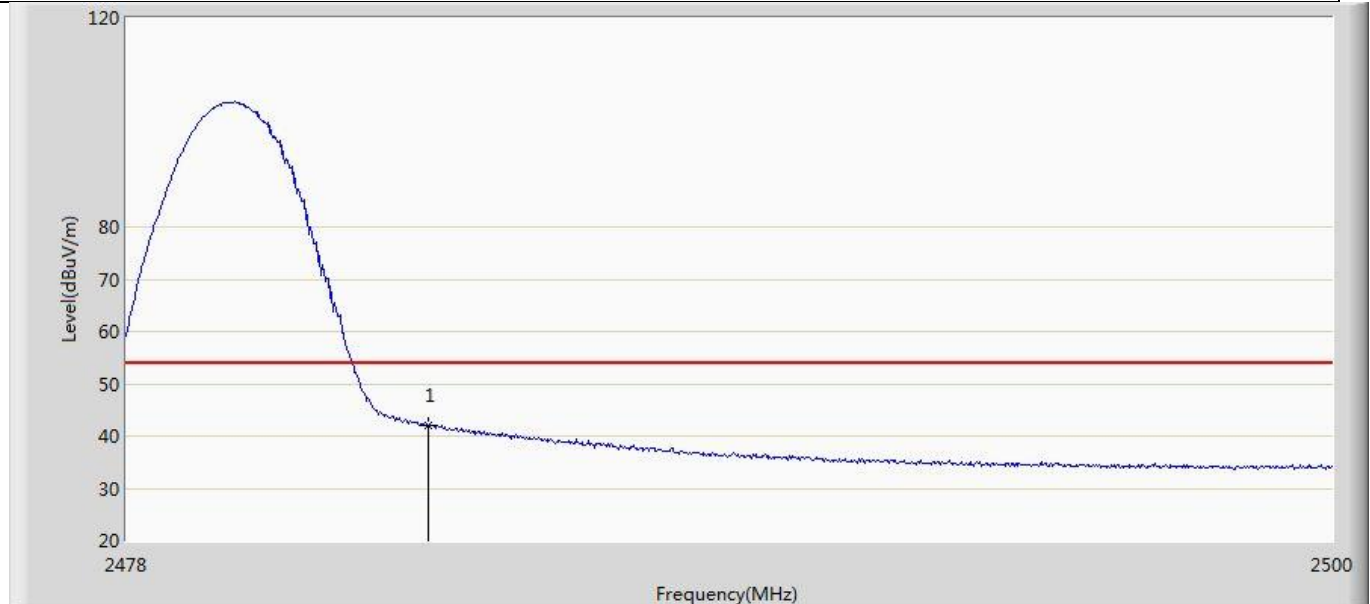
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.637	0.632	-19.363	54.000	34.005	AV

Profile: 2290864R	Page No.: 28
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2402MHz by LE_Coded S=2	



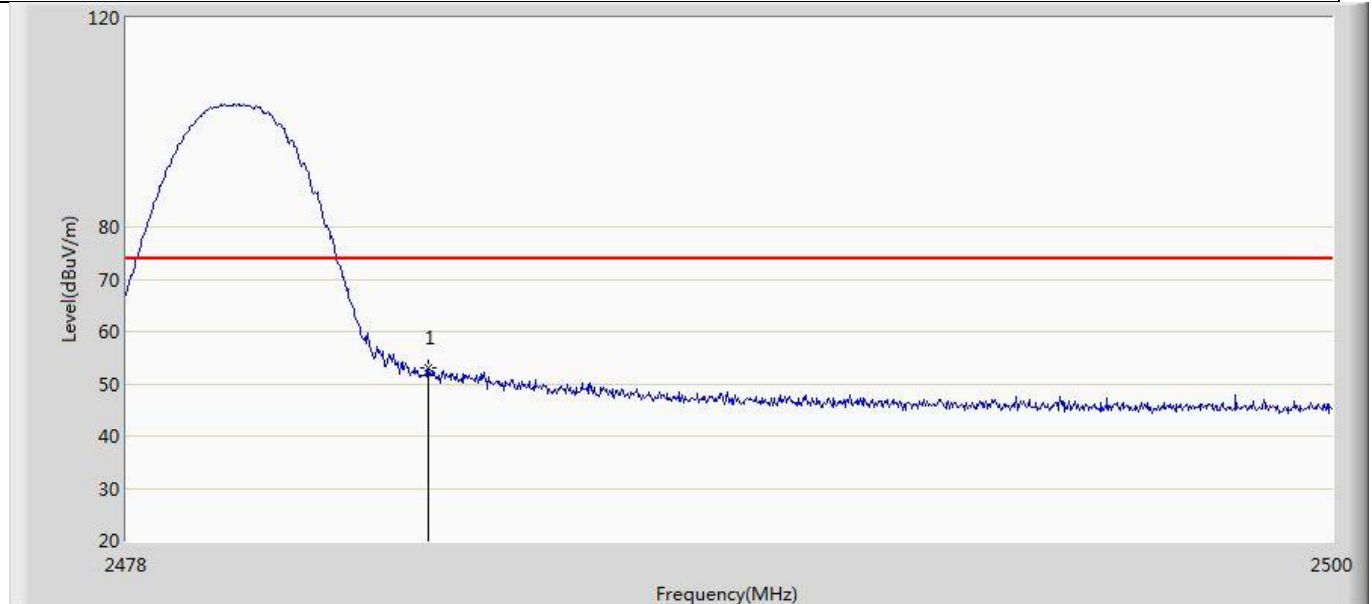
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.231	12.226	-27.769	74.000	34.005	PK

Profile: 2290864R	Page No.: 29
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



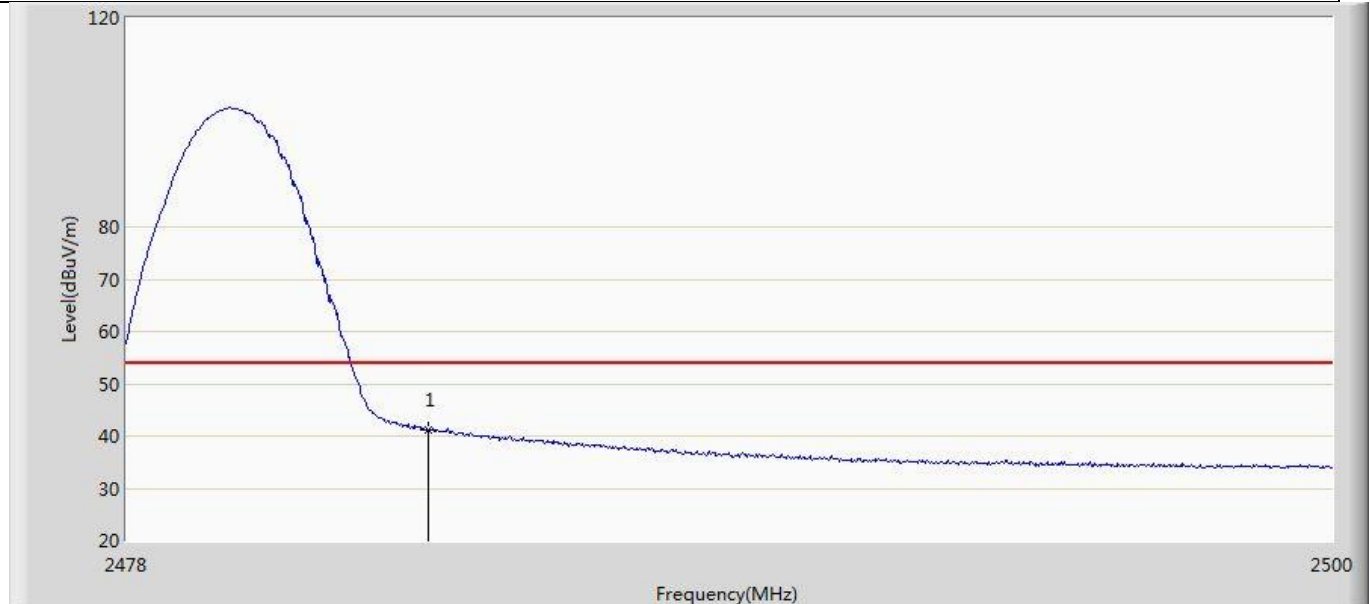
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	41.946	7.725	-12.054	54.000	34.221	AV

Profile: 2290864R	Page No.: 30
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: Electronic fence transmitter	Power: DC 12V
Note: Mode 4: Transmit at 2480MHz by LE_Coded S=2	



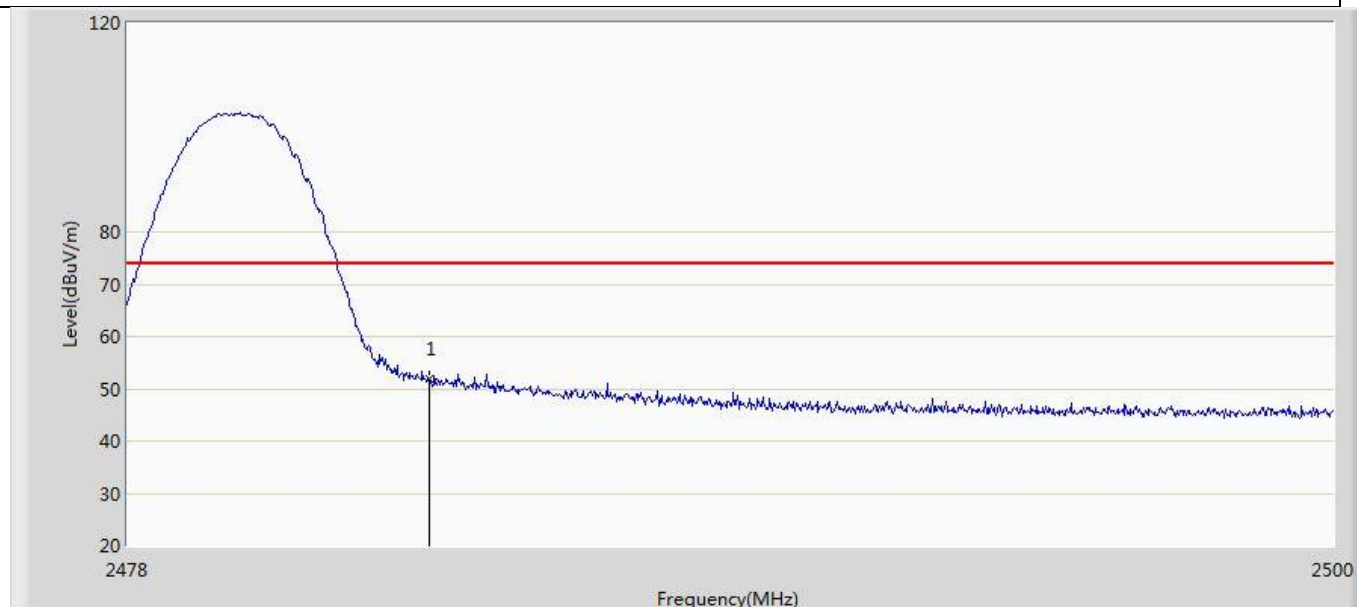
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.165	18.944	-20.835	74.000	34.221	PK

Profile: 2290864R	Page No.: 31
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	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	41.280	7.059	-12.720	54.000	34.221	AV

Profile: 2290864R	Page No.: 32
Engineer: RenZhang	
Site: AC5	Time: 2022/10/17 - 23:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: Electronic fence transmitter	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	51.924	17.703	-22.076	74.000	34.221	PK

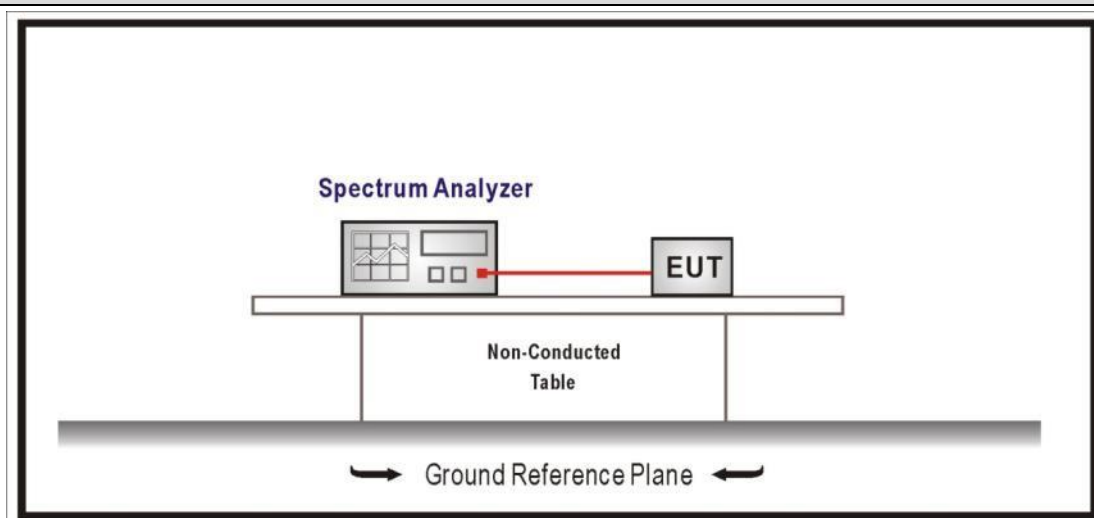
Note:

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

4.5 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 the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

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

4.5.4 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	1021	611	>500	Pass
	19	2440	1022	664	>500	Pass
	39	2480	1029	658	>500	Pass
2	00	2402	2043	1015	>500	Pass
	19	2440	2030	1125	>500	Pass
	39	2480	2047	1100	>500	Pass
3	00	2402	1010	642	>500	Pass
	19	2440	1025	644	>500	Pass
	39	2480	1013	650	>500	Pass
4	00	2402	1052	653	>500	Pass
	19	2440	1051	642	>500	Pass
	39	2480	1052	649	>500	Pass

Note : The worst case of Occupied Bandwidth as below:

99% Occupied Bandwidth
Mode 2 CH39 (2480MHz)



6dB Occupied Bandwidth
Mode 2 CH19 (2440MHz)



4.6 Fundamental emission output power

VERDICT: PASS

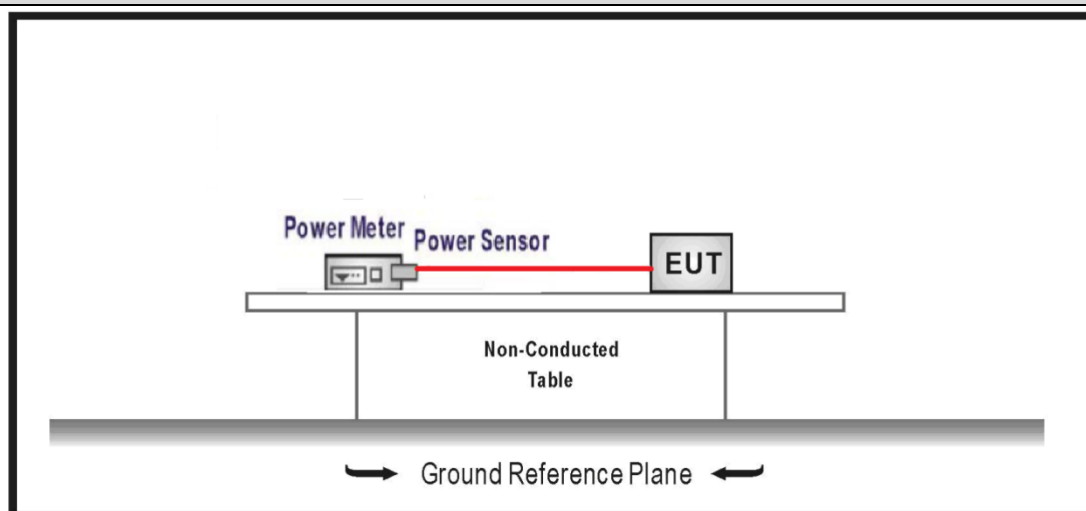
4.6.1 Limit

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
☐	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 .

4.6.2 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

4.6.4 Test Data

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
Mode 1	00	2402	6.44	7.44	≤30	≤36	Pass
	19	2440	6.11	7.11	≤30	≤36	Pass
	39	2480	6.04	7.04	≤30	≤36	Pass
Mode 2	00	2402	6.51	7.51	≤30	≤36	Pass
	19	2440	6.42	7.42	≤30	≤36	Pass
	39	2480	6.49	7.49	≤30	≤36	Pass
Mode 3	00	2402	6.41	7.41	≤30	≤36	Pass
	19	2440	6.22	7.22	≤30	≤36	Pass
	39	2480	5.98	6.98	≤30	≤36	Pass
Mode 4	00	2402	6.36	7.36	≤30	≤36	Pass
	19	2440	6.25	7.25	≤30	≤36	Pass
	39	2480	6.2	7.2	≤30	≤36	Pass

Note 1: EIRP=Conducted power+Antenna gain

Note 2: The antenna gain please refer to clause 1.2

4.7 Power Density

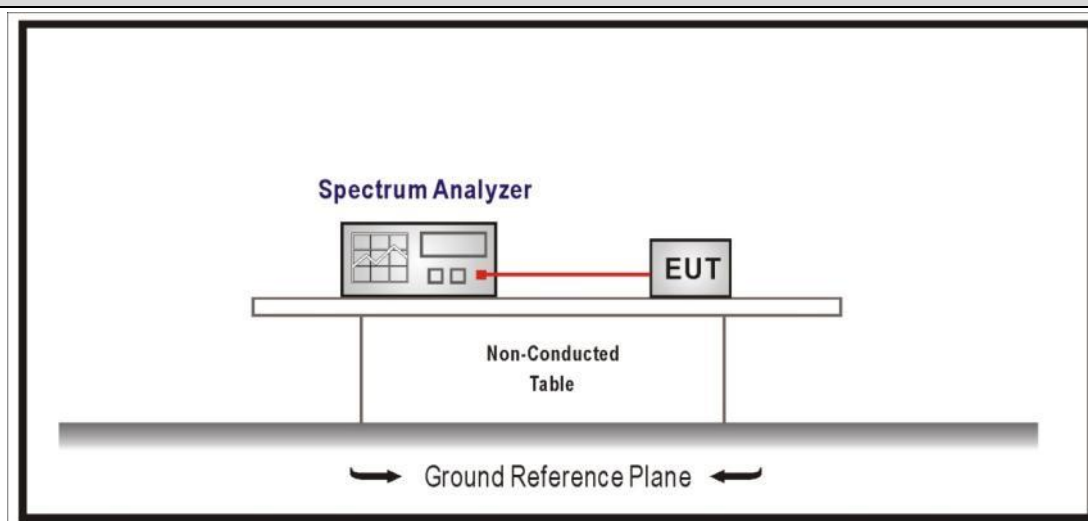
VERDICT: PASS

4.7.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
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Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

4.7.2 Test Setup



4.7.3 Test Procedure

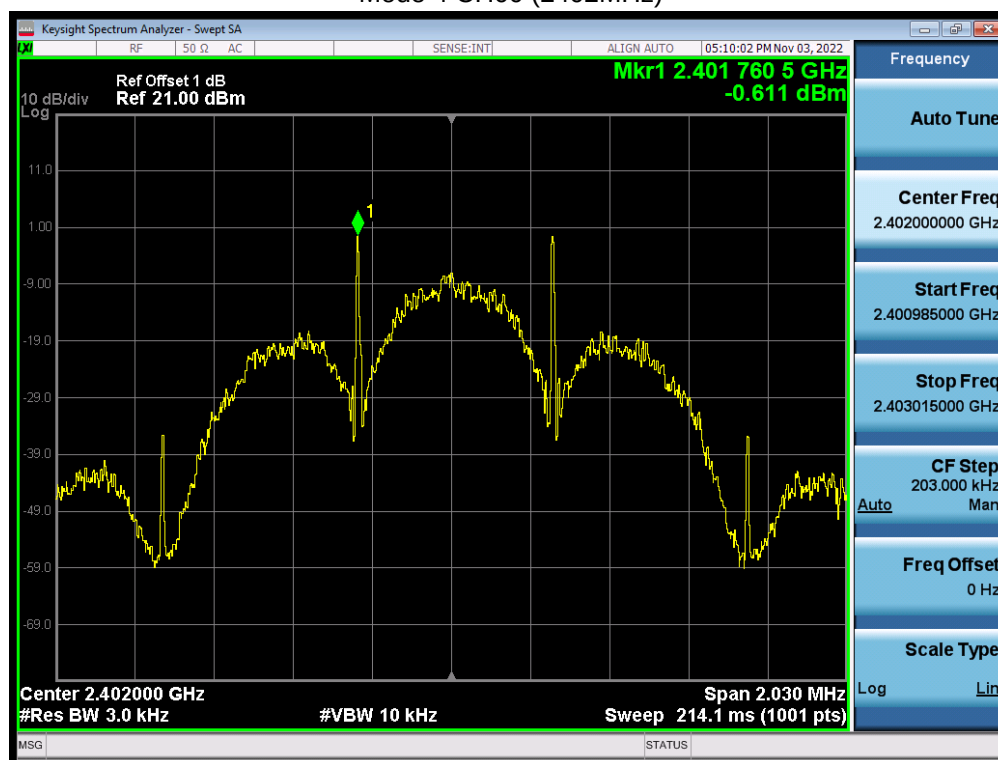
	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPS-1(Duty cycle $\geq 98\%$)
	☐	ANSI C63.10	11.10.4	Method AVGPS-1A(Duty cycle $\geq 98\%$)
	☐	ANSI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

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-8.675	≤8	Pass
	19	2440	-8.834	≤8	Pass
	39	2480	-8.371	≤8	Pass
Mode 2	00	2402	-10.119	≤8	Pass
	19	2440	-10.197	≤8	Pass
	39	2480	-10.301	≤8	Pass
Mode 3	00	2402	-2.747	≤8	Pass
	19	2440	-0.761	≤8	Pass
	39	2480	-1.210	≤8	Pass
Mode 4	00	2402	-0.611	≤8	Pass
	19	2440	-0.870	≤8	Pass
	39	2480	-1.032	≤8	Pass

Note : The worst case of PSD as below:

Mode 4 CH00 (2402MHz)



4.8 Antenna Requirement**VERDICT: PASS****4.8.1 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.

4.8.2 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 _____