



Test report No:
2160271R-RF-US-P06V01

FCC&ISED TEST REPORT

Product Name	Handheld Thermal Binoculars
TradeMark	Guide
Model and /or type reference	TN430、 TN450
FCC ID	2AKU5ZG07
Applicant's name / address	Wuhan Guide Sensmart Tech Co., Ltd NO.6 Huanglong Hill South Road, Donghu High-Tech Development Zone, Wuhan, Hubei, China
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 KDB558074 D01v05r02
Verdict Summary	IN COMPLIANCE
Documented by (name / position & signature)	Adma Lu/Project Engineer 
Approved by (name / position & signature)	Jack Zhang/ Supervisor 
Date of issue	2021-09-13
Report Version	V1.0
Report template No	Template_FCC Part 15C-RF-V1.0

INDEX

	page
Competences and Guarantees.....	4
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 Data Rate	12
1.4 Channel List	14
2 Description of Test Setup	15
2.1 Operating mode(s) used for tests.....	15
2.2 Support / Auxiliary equipment / unit / Test software for the EUT	15
2.3 Power Index	15
2.4 Test Configuration / Block diagram used for tests	16
2.5 Testing process.....	17
3 Verdict summary section	18
3.1 Standards	18
3.2 Deviation(s) from the Standard(s) / Test Specification(s)	18
3.3 Overview of results.....	19
3.4 Test Facility	20
4 Test Results.....	21
4.1 AC Power Line Conducted Emission	21
4.1.1 Limit.....	21
4.1.2 Test Setup.....	21
4.1.3 Test Procedure	21
4.1.4 Test Data.....	22
4.2 Emissions in restricted frequency bands	23
4.2.1 Limit.....	23
4.2.2 Test Setup.....	25

4.2.3	Test Procedure	26
4.2.4	Test Data.....	27
4.3	Emissions in non-restricted frequency band	47
4.3.1	Limit.....	47
4.3.2	Test Setup.....	47
4.3.3	Test Procedure	47
4.3.4	Test Data.....	48
4.4	Radiated Emission Band Edge	49
4.4.1	Limit.....	49
4.4.2	Test Setup.....	49
4.4.3	Test Procedure	50
4.4.4	Test Data.....	51
4.5	DTS Bandwidth	76
4.5.1	Limit.....	76
4.5.2	Test Setup.....	76
4.5.3	Test Procedure	76
4.5.4	Test Data.....	77
4.6	Fundamental emission output power	78
4.6.1	Limit.....	78
4.6.2	Test Setup.....	78
4.6.3	Test Procedure	79
4.6.4	Test Data.....	80
4.7	Power Density	81
4.7.1	Limit:.....	81
4.7.2	Test Setup.....	81
4.7.3	Test Procedure	81
4.7.4	Test Data.....	82
4.8	Antenna Requirement	83
4.8.1	Limit:.....	83
4.8.2	Antenna Connector Construction:.....	83
5	Test setup photo and EUT Photo	84

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 PEUT: Handheld Thermal Binoculars Suzhou, 215006, P.R. China
Date(receive sample)	Jun. 08, 2021
Date (start test)	Jun. 09, 2021
Date (finish test)	Sep. 06, 2021

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
Tx	: Transmitter
Rx	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2160271R-RF-US-P06V01	V1.0	Initial issue of report.	2021-09-13

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 15.24.
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 Data Rate;
 - Chapter 1.4 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	2021.04.28	2022.04.27
Two-Line V-Network	R&S	ENV216	101044	2021.03.20	2022.03.19
50ohm Termination	SHX	TF2	7081402	2020.09.23	2021.09.22
50ohm Termination	SHX	TF2	7081403	2020.09.23	2021.09.22
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2021.07.09	2022.07.08
Dekra test software	Dekra	-	-	-	-

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

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2021.07.11	2022.07.10
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.03.20	2022.03.19
Coaxial Cable	Woken	A50-SMAMSMAM-1m	20111443	2020.11.13	2021.11.12
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2021.07.09	2022.07.08

Radiated Emission(30MHz-1GHz) / AC2

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2020.08.15	2021.08.14
Loop Antenna	R&S	HFH2-Z2	833799/003	2021.03.04	2022.03.03
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9168	1231	2021.04.19	2022.04.18
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2021.03.31	2022.03.30
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2020.08.13	2021.08.12

Radiated Emission / AC5(1GHz-40GHz)

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EXA Spectrum Analyzer	Keysight	N9010A	MY55370495	2021.03.20	2022.03.19
Amplifier	Keleto	LNPA	SK20190225	2021.09.26	2022.09.25
Pre-Amplifier	EMCI	EMC184045SE	980263	2021.05.22	2022.05.21
DRG Horn Antenna	ETS-Lindgren	3117	167055	2021.08.06	2022.08.05
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2021.04.19	2022.04.18
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2021.03.31	2022.03.30
Coaxial Cable	ROSENBERGER	LA1-C011- 2000/3000	AC5-40G	2021.03.20	2022.03.19

UNCERTAINTY

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

Test item	Uncertainty
AC Power Line Conducted Emission	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/PMN.....:	Handheld Thermal Binoculars
Model No./HVIN.....:	TN430、 TN450
TradeMark.....:	Guide
FCC ID.....:	2AKU5ZG07
Manufacturer.....:	Wuhan Guide Sensmart Tech Co., Ltd
Manufacturer address.....:	NO.6 Huanglong Hill South Road, Donghu High-Tech Development Zone, Wuhan, Hubei, China
EUT identification.....:	Different lens focal length

Wireless specification.....:	WIFI
Operating frequency range(s).....:	2400~2483.5MHz
Type of modulation.....:	DSSS: BPSK,QPSK,CCK OFDM: BPSK, QPSK, 16QAM, 64QAM
Number of channel.....:	802.11b/g/n(20MHz): 11

Rated power supply.....:	Voltage and Frequency	
	<input type="checkbox"/>	AC: 220 - 240 V, 50/60 Hz
	<input type="checkbox"/>	100 - 240 Vac, 50/60 Hz for adapter 24 Vdc for Wake-up light
	<input type="checkbox"/>	DC: 12 - 24 Vdc
	<input type="checkbox"/>	Battery:
	<input checked="" type="checkbox"/>	Battery: 3.7 V

1.2 Antenna Information

Antenna model / type number.....:	N/A		
Antenna serial number.....:	N/A		
Antenna Delivery	<input checked="" type="checkbox"/>	1TX + 1RX	
	<input type="checkbox"/>	2TX + 2RX	
	<input type="checkbox"/>	Others:.....	
Antenna technology	<input checked="" type="checkbox"/>	SISO	
	<input type="checkbox"/>	MIMO	<input type="checkbox"/> Basic
			<input type="checkbox"/> CDD
			<input type="checkbox"/> Sectorized
			<input type="checkbox"/> Beam-forming
Antenna Type	<input type="checkbox"/>	External	<input type="checkbox"/> Dipole
			<input type="checkbox"/> Sectorized
	<input checked="" type="checkbox"/>	Internal	<input checked="" type="checkbox"/> PIFA
			<input type="checkbox"/> PCB
			<input type="checkbox"/> Metal Antenna
Antenna Gain	3 dBi		

1.3 Data Rate

IEEE 802.11b

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

IEEE 802.11g

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

IEEE 802.11n

Spatial streames	MCS Index	Modulation	Coding rate	Data Rate(Mb/s)			
				20MHz		40MHz	
				800ns GI	400ns GI	800ns GI	400ns GI
1	0	BPSK	1/2	6.5	7.2	13.5	15.0
1	1	QPSK	1/2	13.0	14.4	27.0	30.0
1	2	QPSK	3/4	19.5	21.7	40.5	45.0
1	3	16-QAM	1/2	26.0	28.9	54.0	60.0
1	4	16-QAM	3/4	39.0	43.3	81.0	90.0
1	5	64-QAM	2/3	52.0	57.8	108.0	120.0
1	6	64-QAM	3/4	58.5	65.0	121.5	135.0
1	7	64-QAM	5/6	65.0	72.2	135.0	150.0

Note 1: Support of 400ns GI is optional on transmit and receive.

1.4 Channel List

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

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
001	2412 MHz	002	2417 MHz	003	2422 MHz	004	2427 MHz
005	2432 MHz	006	2437 MHz	007	2442 MHz	008	2447 MHz
009	2452 MHz	010	2457 MHz	011	2462 MHz	-	-

IEEE 802.11n(40MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
003	2422 MHz	004	2427 MHz	005	2432 MHz	006	2437 MHz
007	2442 MHz	008	2447 MHz	009	2452 MHz	-	-

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

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

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

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

2.2 Support / Auxiliary equipment / unit / Test software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software:

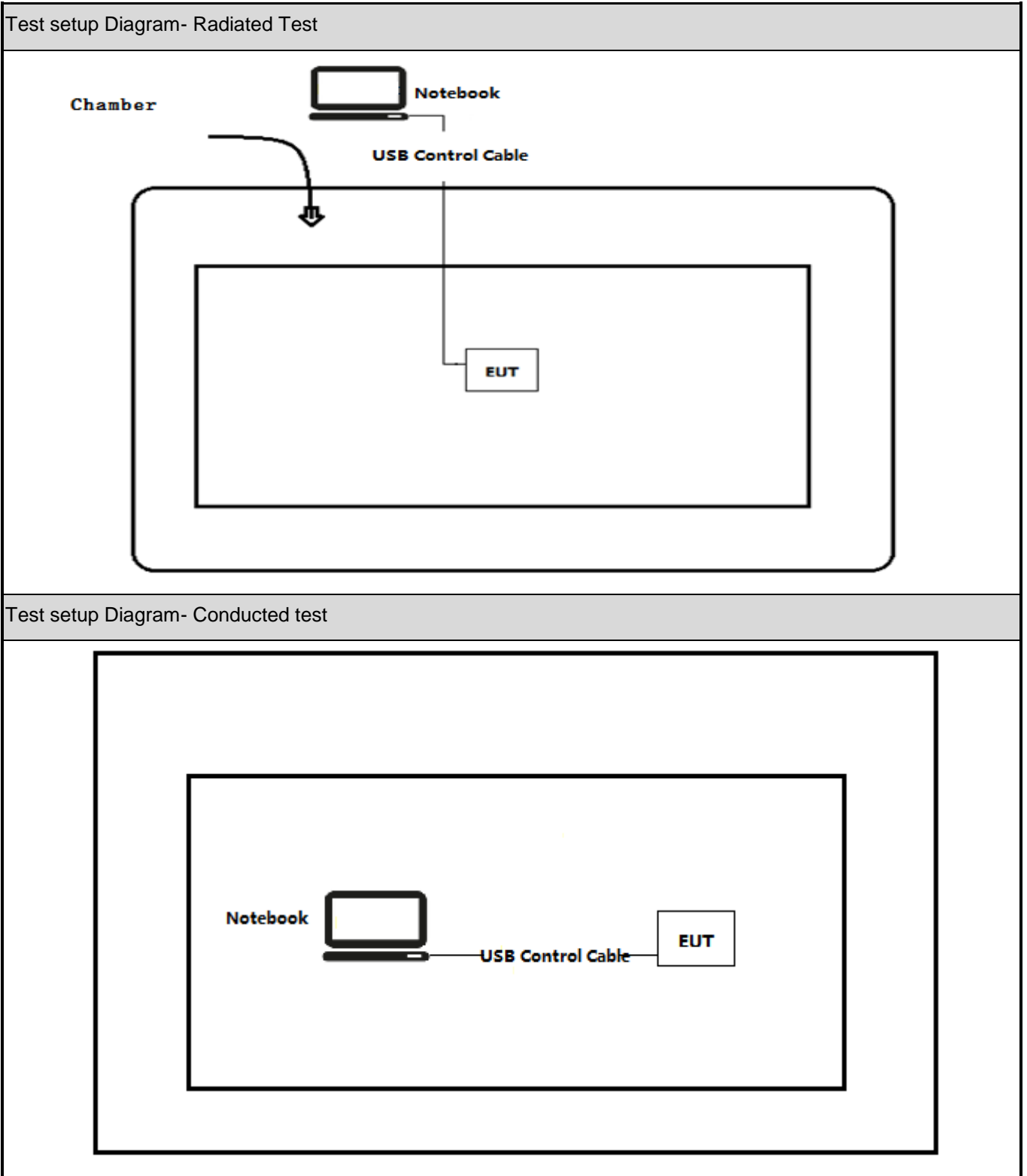
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	Think pad x220	Lenovo	Adapter
Software	Type / Version	Manufacturer	Supplied by
EspRFtestTool	N/A	N/A	N/A

2.3 Power Index

Due to applicant have fixed the power setting in there software, for testing, we just used the default power.

2.4 Test Configuration / Block diagram used for tests

The following test setup / configuration / block diagram has been used during the tests:



2.5 Testing process

1	Setup the EUT as shown in Section 2.3.
2	Execute the EspRFtestTool on the notebook.
3	Configure the test mode, the test channel, and the 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	2021	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 1	2019	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(d), 15.209	PASS	---
Emissions in non-restricted frequency bands	FCC 15.247(d)	PASS	---
Radiated Emission Band Edge	FCC 15.247(d), 15.209	PASS	---
Fundamental emission output power	FCC 15.247(b)(3)	PASS	---
DTS Bandwidth	FCC 15.247(a)(2)	PASS	---
Power Spectral Density	FCC 15.247(e)	PASS	---
Antenna Requirement	FCC 15.203	PASS	---

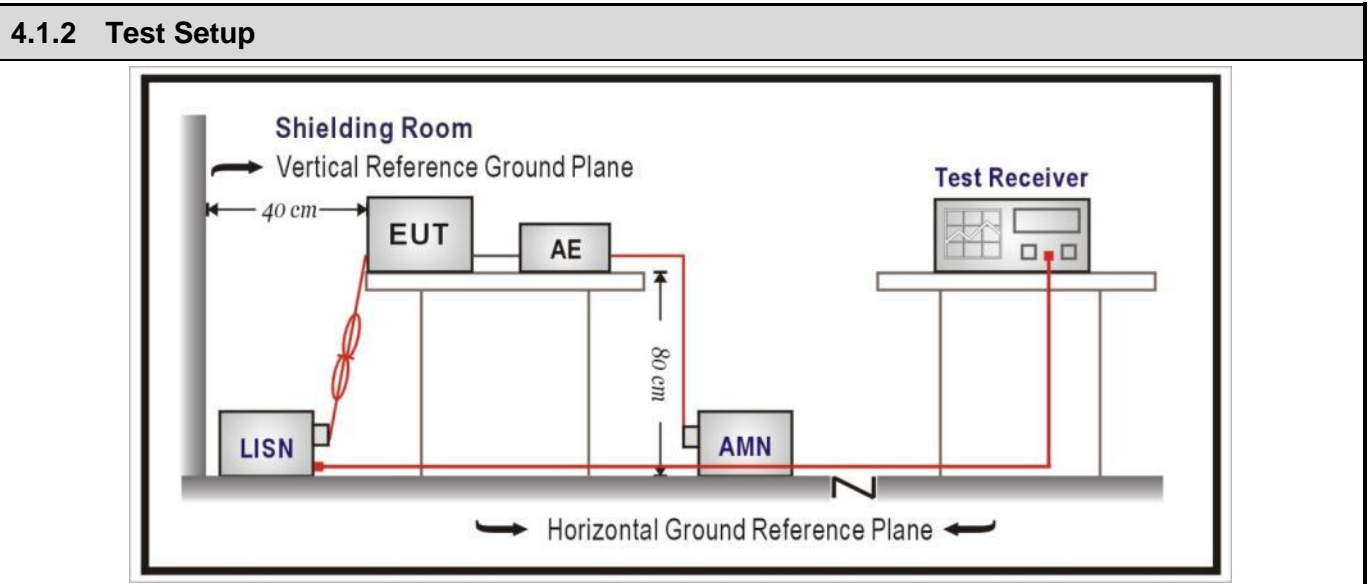
3.4 Test Facility

USA : FCC Designation Number: CN1199

4 TEST RESULTS

4.1 AC Power Line Conducted Emission	VERDICT: N/A
---	---------------------

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
<p>¹⁾ At the transition frequency, the lower limit applies.</p> <p>²⁾ The limit decreases linearly with the logarithm of the frequency.</p>		



4.1.3 Test Procedure			
	References Rule	Chapter	Item
<input checked="" type="checkbox"/>	ANSI C63.10-2013	6.2	Standard test method for ac power-line conducted emissions from unlicensed wireless devices

4.1.4 Test Data

N/A: EUT is powered by battery.

4.2 Emissions in restricted frequency bands	VERDICT: PASS
--	----------------------

4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.205; 15.209		
Restricted Bands of operation for FCC			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	Above 38.6
13.36 – 13.41	--	--	--
Restricted Bands of operation for ISED			
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	13.36 - 13.41	960 - 1427	9.0 - 9.2
0.495 - 0.505	16.42 - 16.423	1435 - 1626.5	9.3 - 9.5
2.1735 - 2.1905	16.69475 - 16.69525	1645.5 - 1646.5	10.6 - 12.7
3.020 - 3.026	16.80425 - 16.80475	1660 - 1710	13.25 - 13.4
4.125 - 4.128	25.5 - 25.67	1718.8 - 1722.2	14.47 - 14.5
4.17725 - 4.17775	37.5 - 38.25	2200 - 2300	15.35 - 16.2
4.20725 - 4.20775	73 - 74.6	2310 - 2390	17.7 - 21.4
5.677 - 5.683	74.8 - 75.2	2483.5 - 2500	22.01 - 23.12
6.215 - 6.218	108 - 138	2655 - 2900	23.6 - 24.0
6.26775 - 6.26825	149.9 - 150.05	3260 - 3267	31.2 - 31.8
6.31175 - 6.31225	156.52475 - 156.52525	3332 - 3339	36.43 - 36.5
8.291 - 8.294	156.7 - 156.9	3345.8 - 3358	Above 38.6
8.362 - 8.366	162.0125 - 167.17	3500 - 4400	--
8.37625 - 8.38675	167.72 - 173.2	4500 - 5150	--
8.41425 - 8.41475	240 - 285	5350 - 5460	--
12.29 - 12.293	322 - 335.4	7250 - 7750	--
12.51975 - 12.52025	399.9 - 410	8025 - 8500	--
12.57675 - 12.57725	608 - 614	--	--

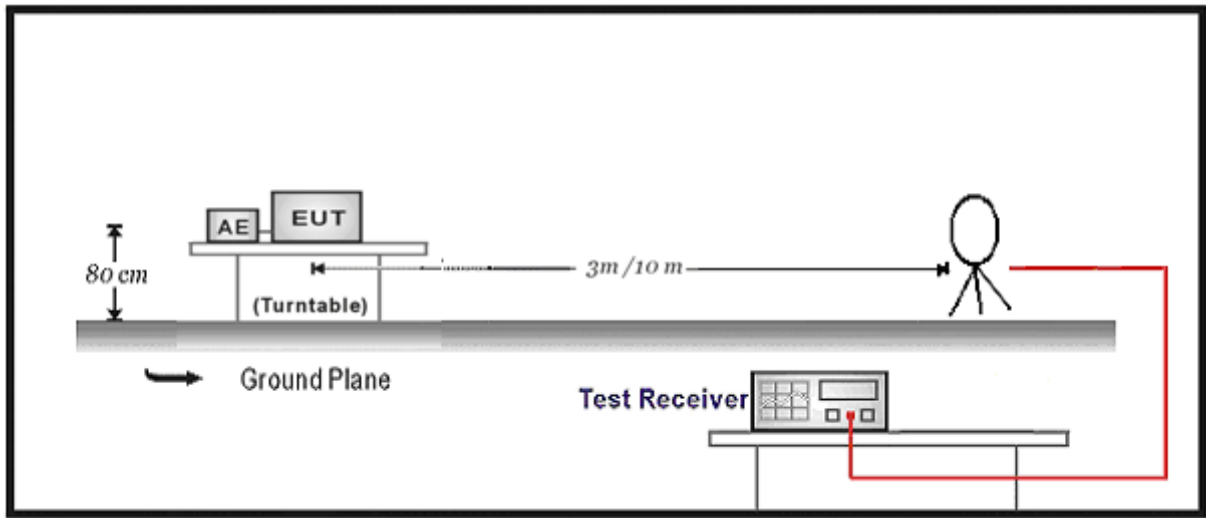
Restricted Band Emissions Limit			
Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009 - 0.49	2400/F(kHz)	48.5 – 13.8	300 _(Note 1)
0.49 - 1.705	24000/F(kHz)	33.8 - 23	30 _(Note 1)
1.705 - 30	30	29.5	30 _(Note 1)
30 - 88	100	40	3 _(Note 2)
88 - 216	150	43.5	3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

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

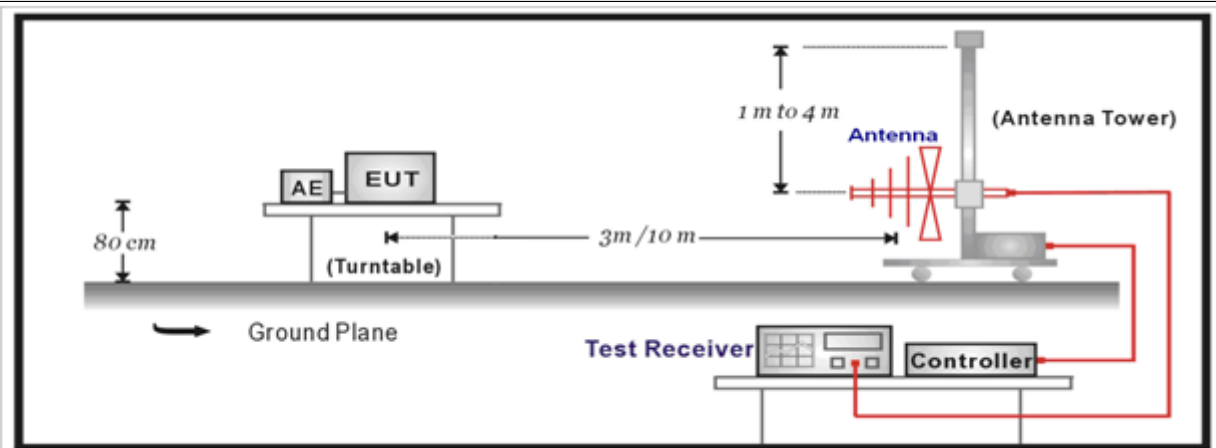
Note 2: At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

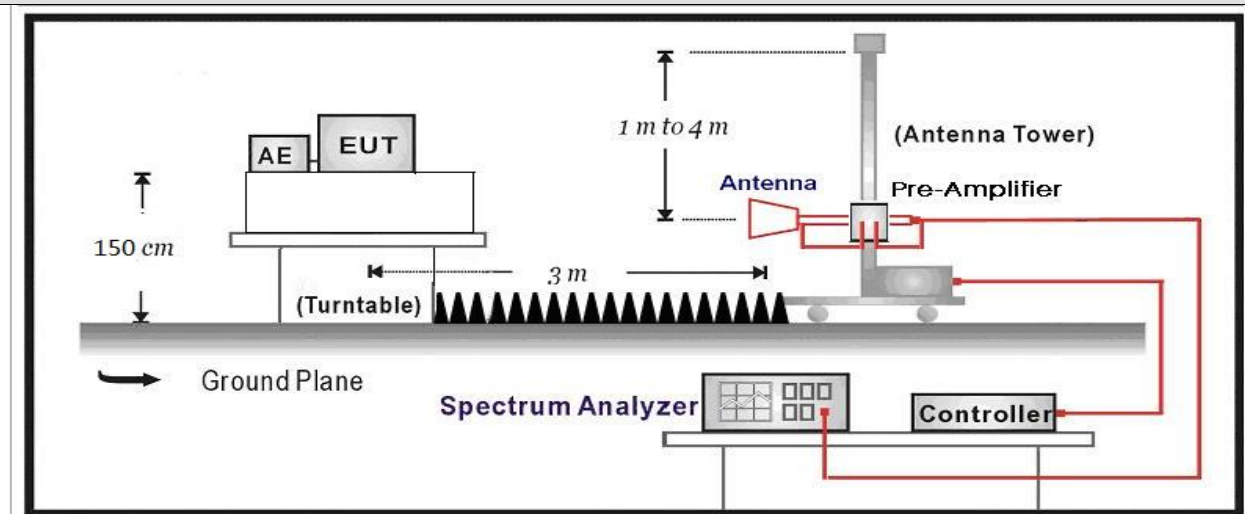
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



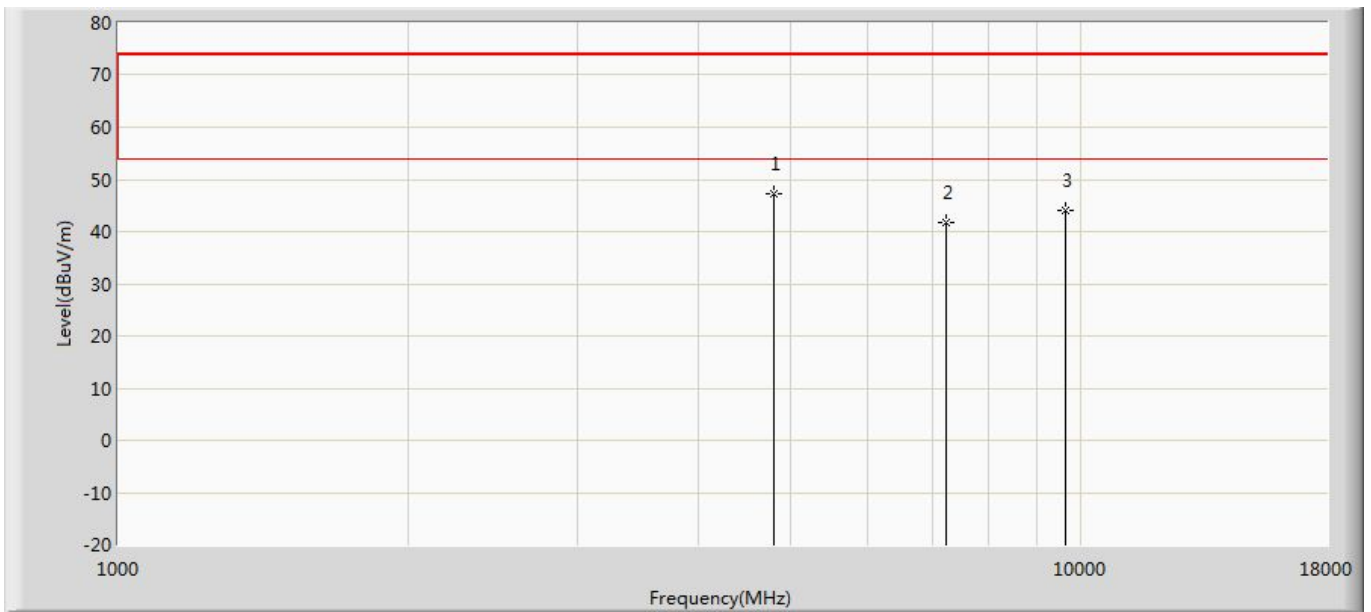
Above 1GHz Test Setup:



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

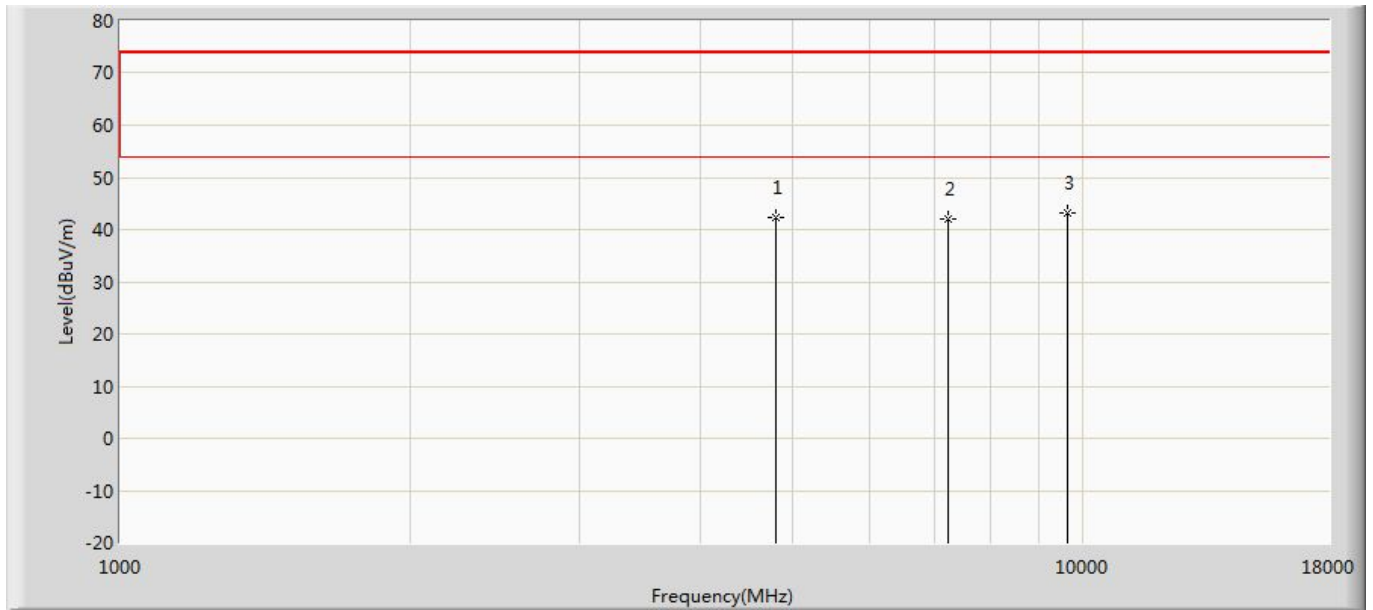
4.2.4 Test Data

Profile: 2160271R	Page No.: 31
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



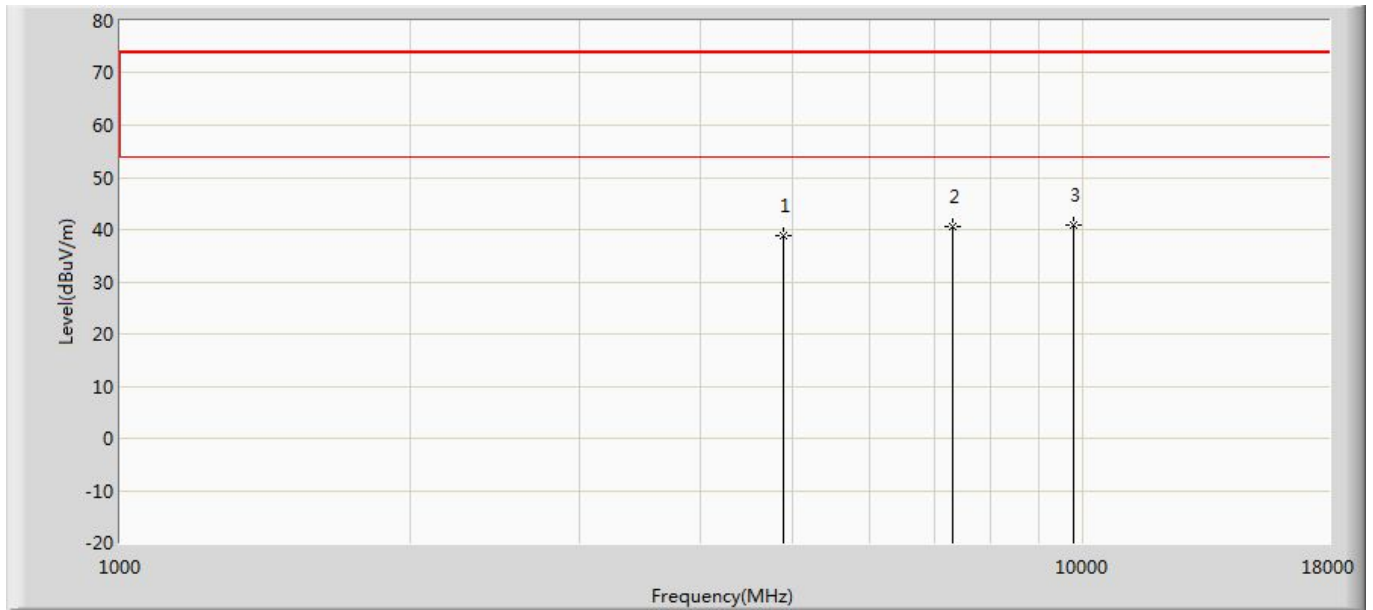
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	4799.500	47.136	52.225	-26.864	74.000	-5.089	PK
2		7236.000	41.879	42.767	-32.121	74.000	-0.888	PK
3		9648.000	43.931	40.245	-30.069	74.000	3.686	PK

Profile: 2160271R	Page No.: 32
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



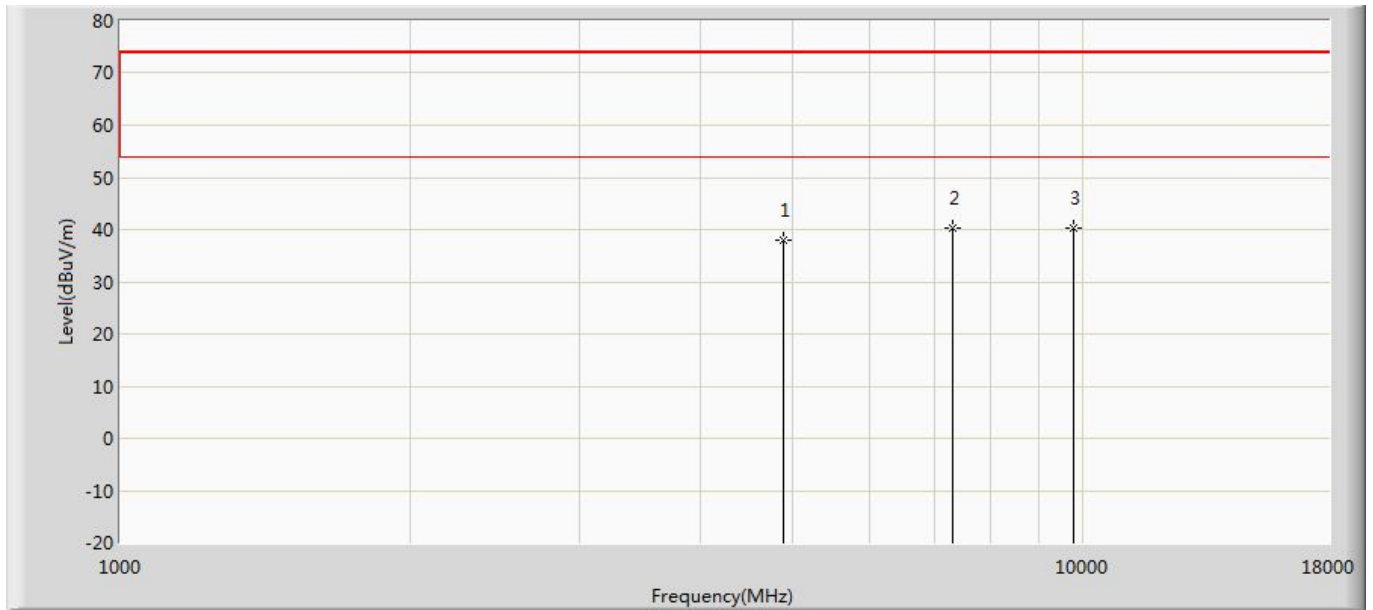
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4799.500	42.461	47.550	-31.539	74.000	-5.089	PK
2		7236.000	42.028	42.916	-31.972	74.000	-0.888	PK
3	*	9648.000	43.147	39.461	-30.853	74.000	3.686	PK

Profile: 2160271R	Page No.: 33
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode1:Transmit at 2442MHz by 802.11b	



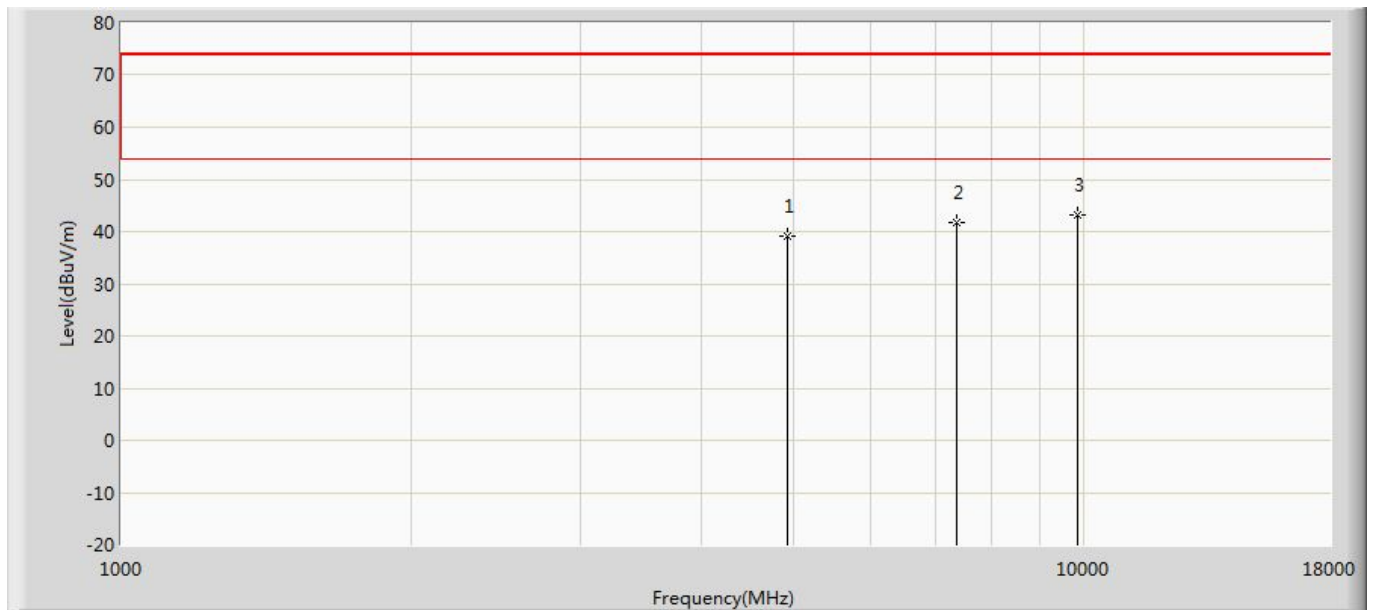
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	38.955	43.848	-35.045	74.000	-4.893	PK
2		7326.000	40.639	41.497	-33.361	74.000	-0.858	PK
3	*	9768.000	40.824	37.778	-33.176	74.000	3.046	PK

Profile: 2160271R	Page No.: 34
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2442MHz by 802.11b	



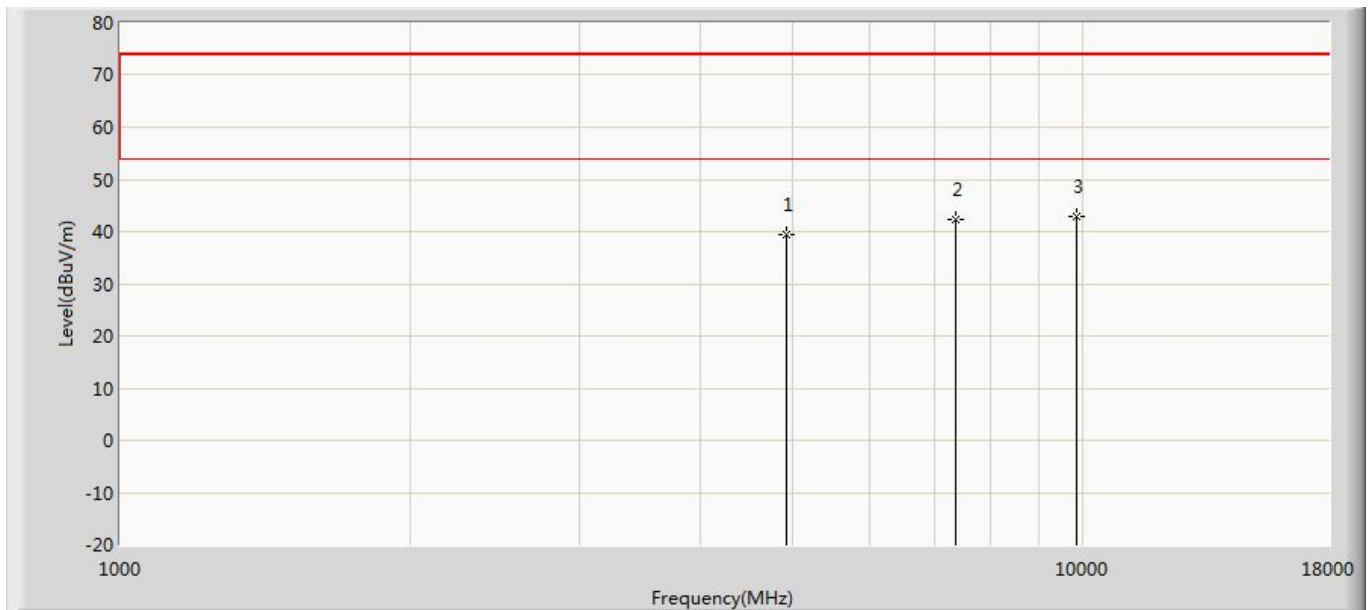
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	38.063	42.956	-35.937	74.000	-4.893	PK
2	*	7326.000	40.380	41.238	-33.620	74.000	-0.858	PK
3		9768.000	40.328	37.282	-33.672	74.000	3.046	PK

Profile: 2160271R	Page No.: 35
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



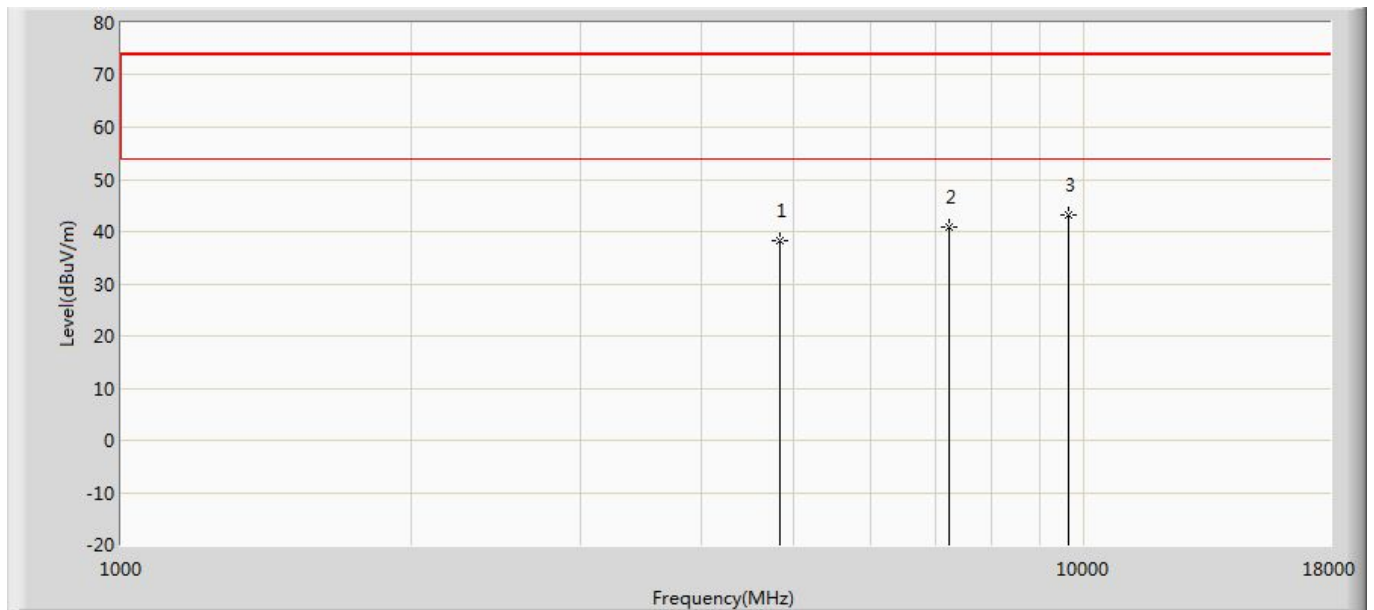
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.115	43.998	-34.885	74.000	-4.883	PK
2		7386.000	41.881	42.942	-32.119	74.000	-1.061	PK
3	*	9848.000	43.161	40.044	-30.839	74.000	3.116	PK

Profile: 2160271R	Page No.: 36
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



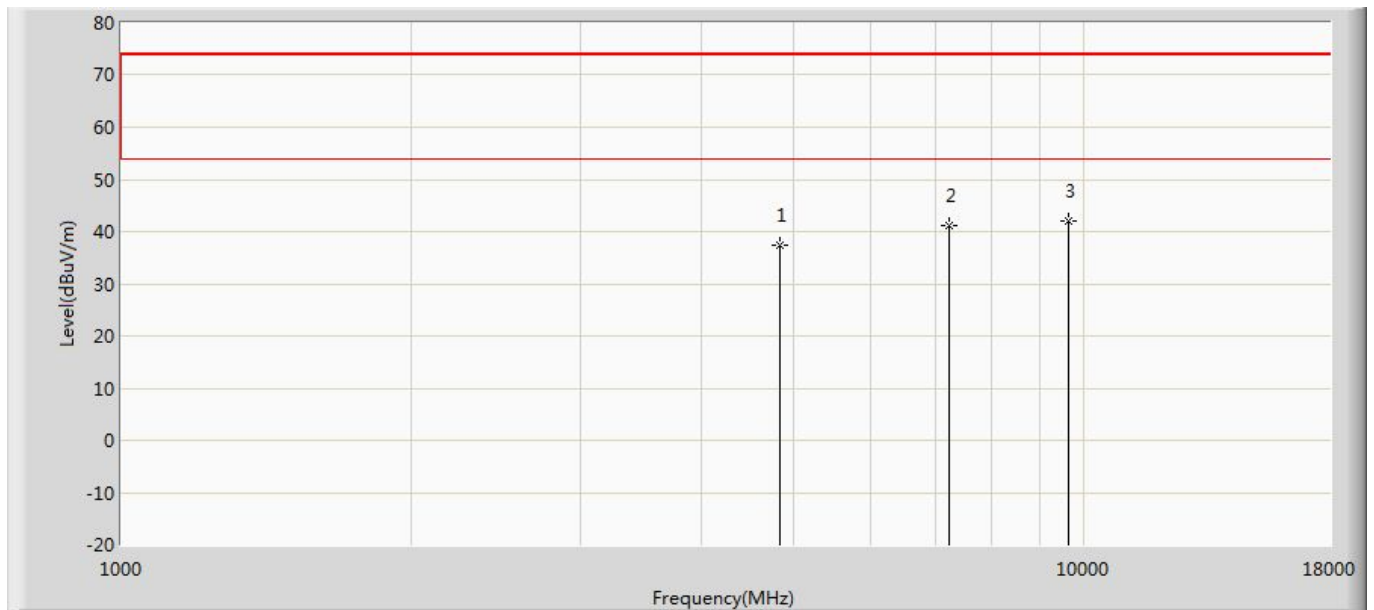
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.314	44.197	-34.686	74.000	-4.883	PK
2		7386.000	42.410	43.471	-31.590	74.000	-1.061	PK
3	*	9848.000	42.859	39.742	-31.141	74.000	3.116	PK

Profile: 2160271R	Page No.: 37
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



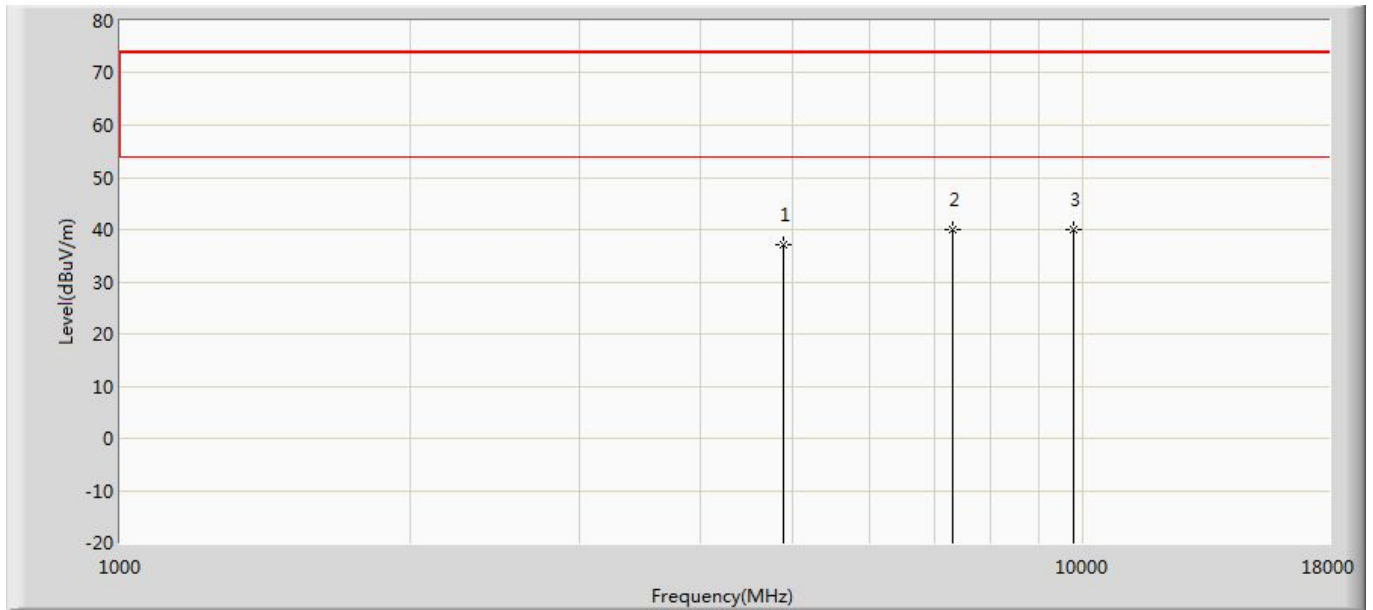
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	38.201	43.360	-35.799	74.000	-5.159	PK
2		7236.000	40.838	41.726	-33.162	74.000	-0.888	PK
3	*	9648.000	43.182	39.496	-30.818	74.000	3.686	PK

Profile: 2160271R	Page No.: 38
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



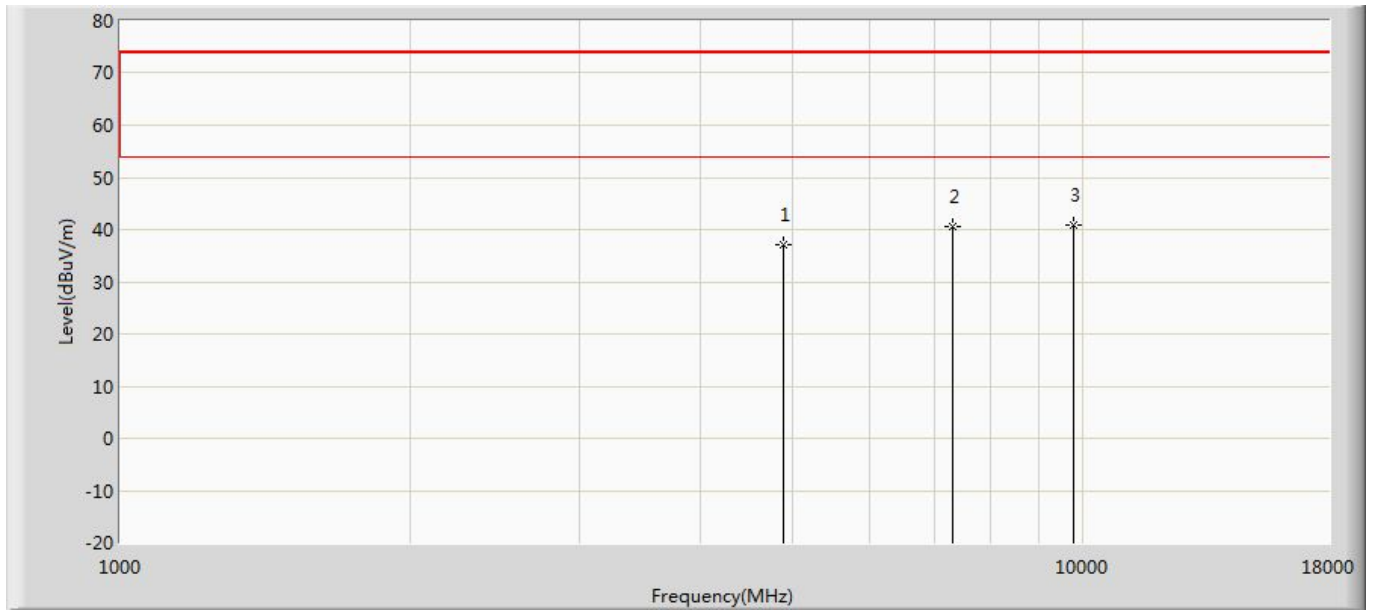
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	37.475	42.634	-36.525	74.000	-5.159	PK
2		7236.000	41.081	41.969	-32.919	74.000	-0.888	PK
3	*	9648.000	41.885	38.199	-32.115	74.000	3.686	PK

Profile: 2160271R	Page No.: 39
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2442MHz by 802.11g	



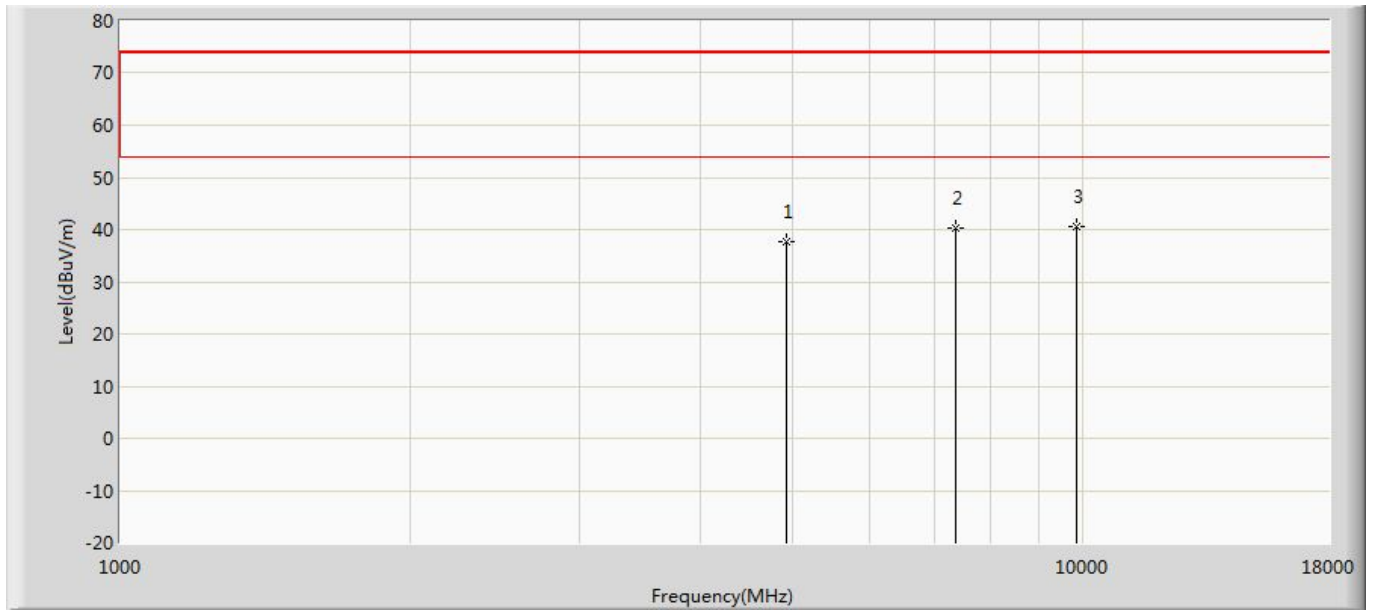
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	37.046	41.939	-36.954	74.000	-4.893	PK
2	*	7326.000	40.031	40.889	-33.969	74.000	-0.858	PK
3		9768.000	39.962	36.916	-34.038	74.000	3.046	PK

Profile: 2160271R	Page No.: 40
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2442MHz by 802.11g	



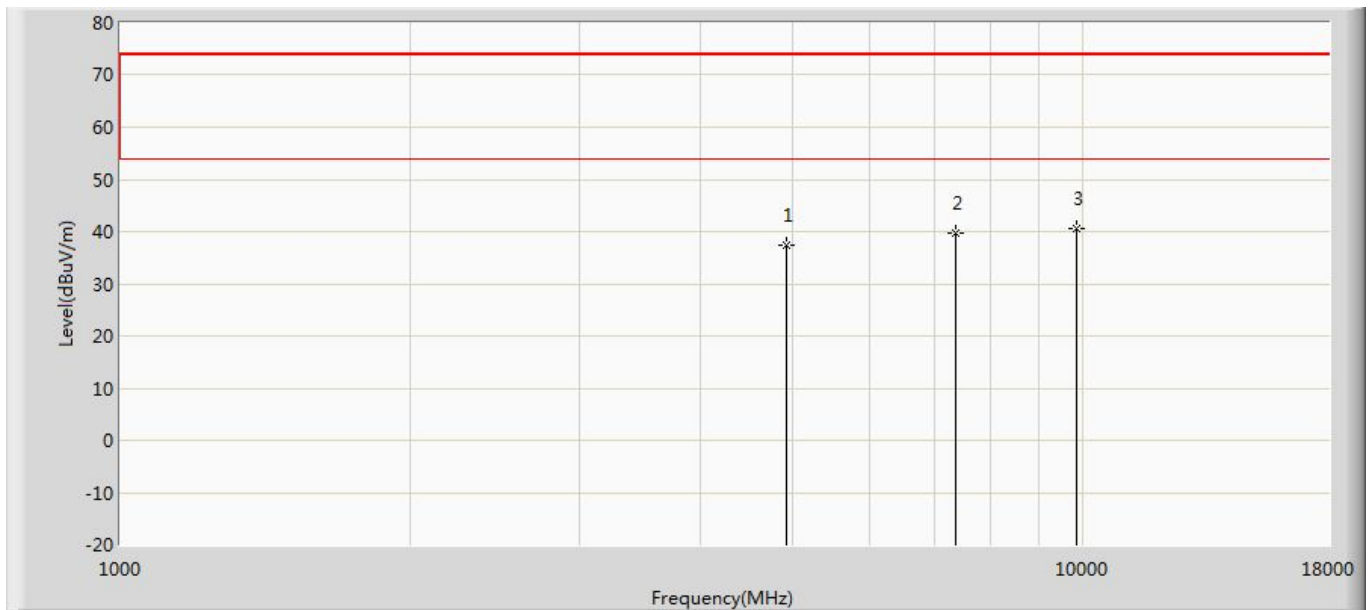
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	37.186	42.079	-36.814	74.000	-4.893	PK
2		7326.000	40.690	41.548	-33.310	74.000	-0.858	PK
3	*	9768.000	40.763	37.717	-33.237	74.000	3.046	PK

Profile: 2160271R	Page No.: 41
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



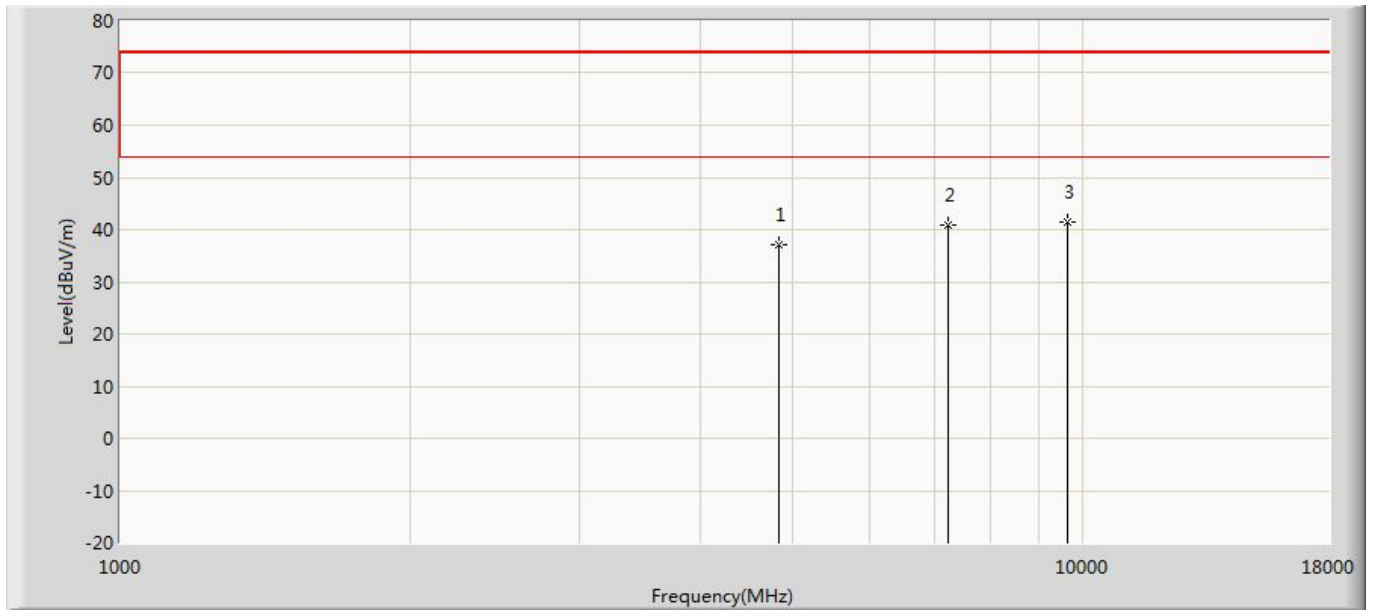
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.740	42.623	-36.260	74.000	-4.883	PK
2		7386.000	40.428	41.489	-33.572	74.000	-1.061	PK
3	*	9848.000	40.669	37.552	-33.331	74.000	3.116	PK

Profile: 2160271R	Page No.: 42
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



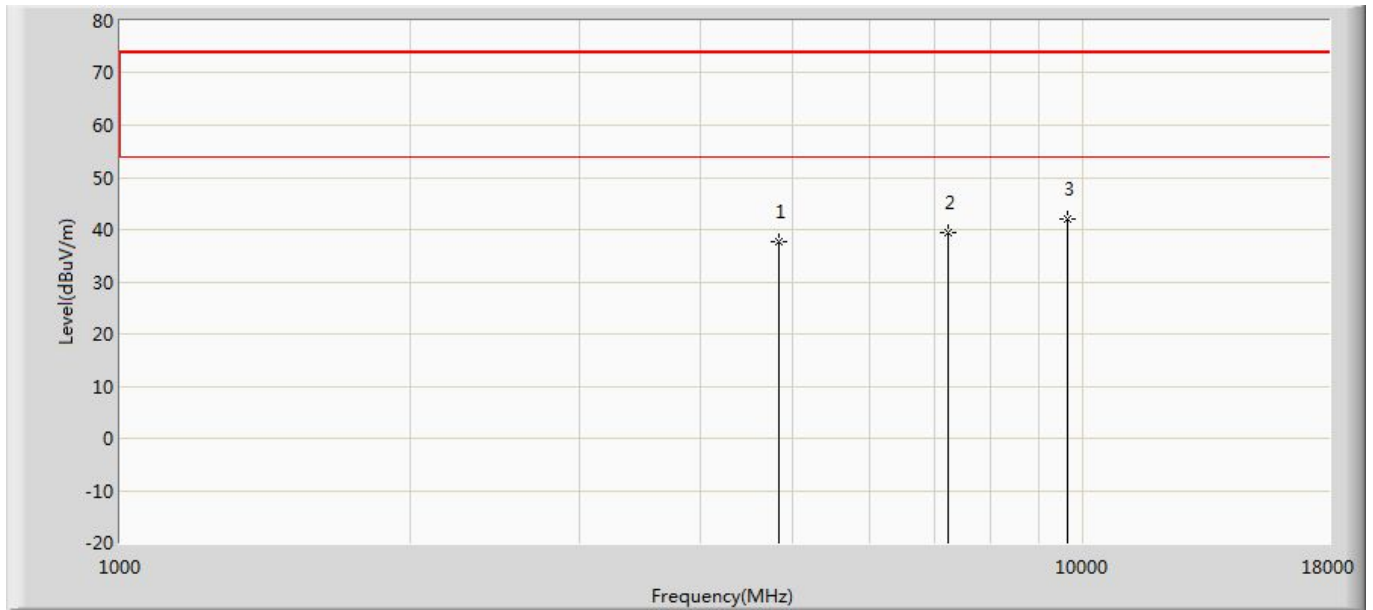
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.501	42.384	-36.499	74.000	-4.883	PK
2		7386.000	39.839	40.900	-34.161	74.000	-1.061	PK
3	*	9848.000	40.701	37.584	-33.299	74.000	3.116	PK

Profile: 2160271R	Page No.: 43
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



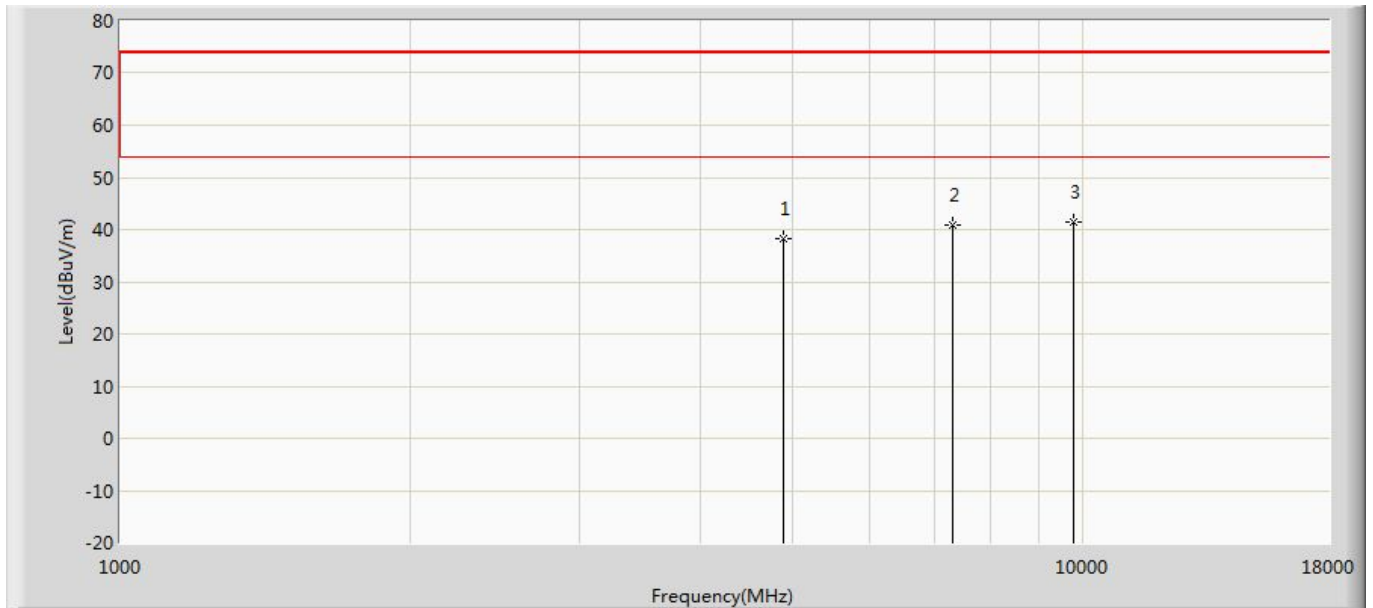
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	36.966	42.125	-37.034	74.000	-5.159	PK
2		7236.000	40.959	41.847	-33.041	74.000	-0.888	PK
3	*	9648.000	41.562	37.876	-32.438	74.000	3.686	PK

Profile: 2160271R	Page No.: 44
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



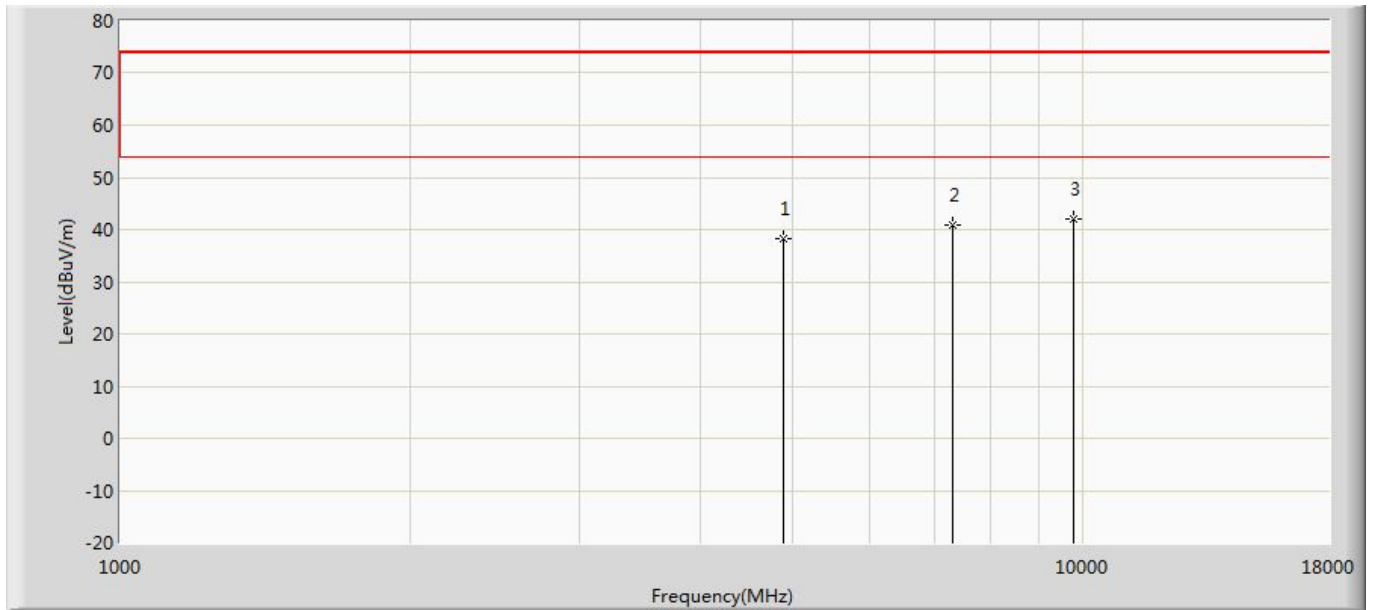
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	37.687	42.846	-36.313	74.000	-5.159	PK
2		7236.000	39.448	40.336	-34.552	74.000	-0.888	PK
3	*	9648.000	41.896	38.210	-32.104	74.000	3.686	PK

Profile: 2160271R	Page No.: 45
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2442MHz by 802.11n	



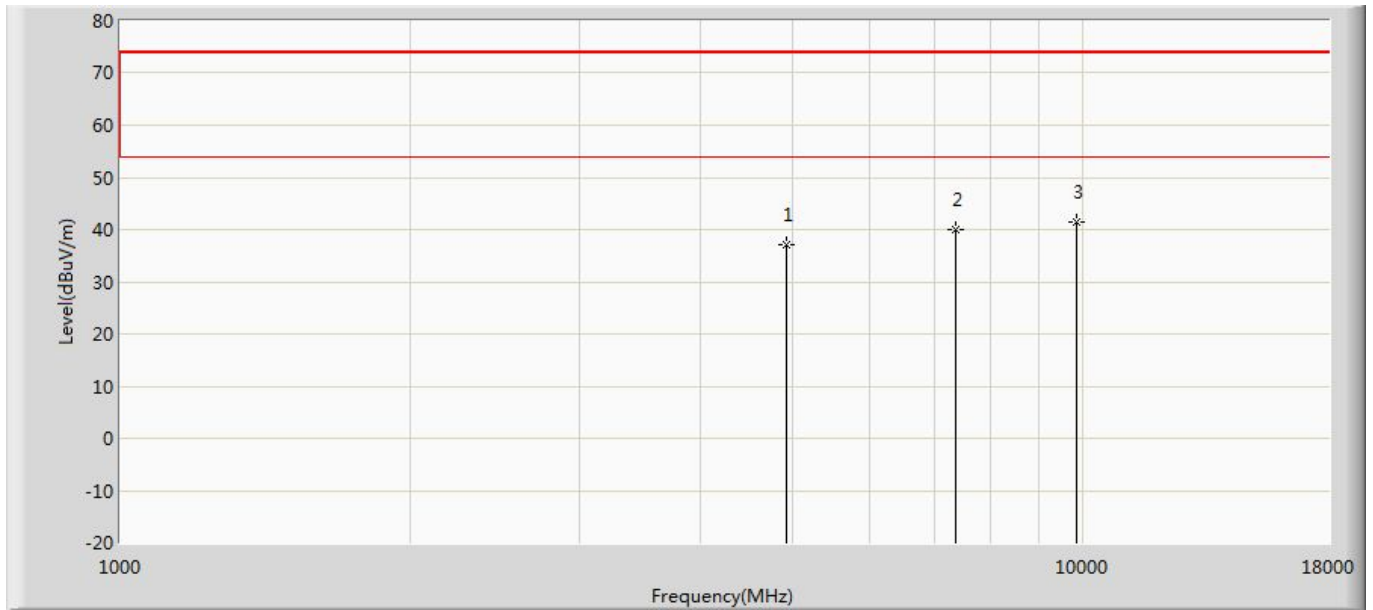
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	38.182	43.075	-35.818	74.000	-4.893	PK
2		7326.000	40.764	41.622	-33.236	74.000	-0.858	PK
3	*	9768.000	41.309	38.263	-32.691	74.000	3.046	PK

Profile: 2160271R	Page No.: 46
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2442MHz by 802.11n	



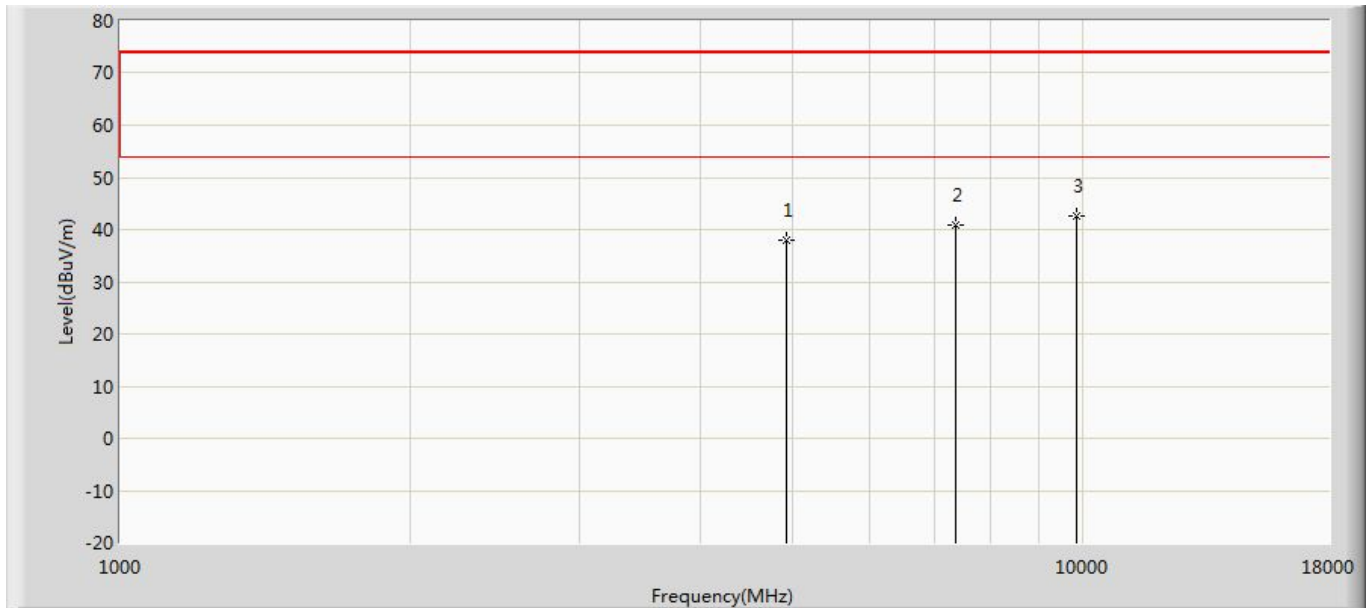
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4884.000	38.235	43.128	-35.765	74.000	-4.893	PK
2		7326.000	40.732	41.590	-33.268	74.000	-0.858	PK
3	*	9768.000	41.903	38.857	-32.097	74.000	3.046	PK

Profile: 2160271R	Page No.: 47
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	37.228	42.111	-36.772	74.000	-4.883	PK
2		7386.000	39.905	40.966	-34.095	74.000	-1.061	PK
3	*	9848.000	41.443	38.326	-32.557	74.000	3.116	PK

Profile: 2160271R	Page No.: 48
Engineer: Juliuszhou	
Site: AC5	Time: 2021/08/29 - 19:31
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



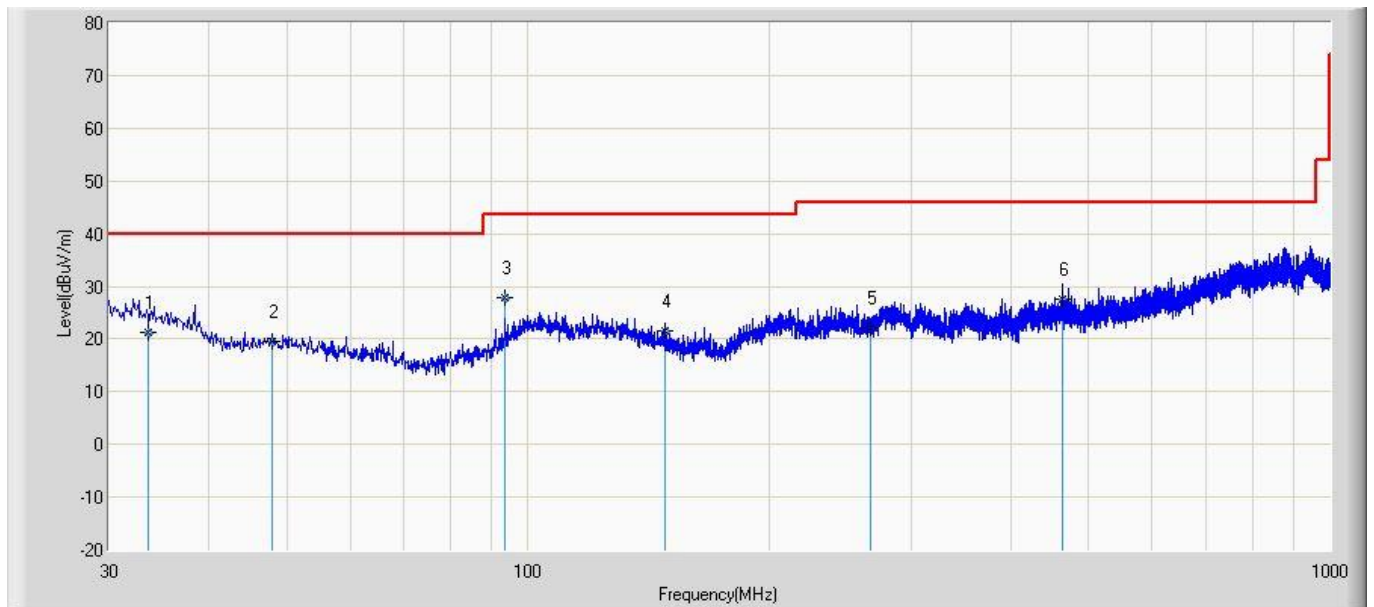
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	38.079	42.962	-35.921	74.000	-4.883	PK
2		7386.000	40.928	41.989	-33.072	74.000	-1.061	PK
3	*	9848.000	42.604	39.487	-31.396	74.000	3.116	PK

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).
3. The test frequency range, 9kHz~30MHz and Above 18GHz worst case are at least 6dB below the limits, therefore no data appear in the report.
4. This limit applies for using average detector, if the test result of peak is lower than average limit, then average measurement needn't be performed.

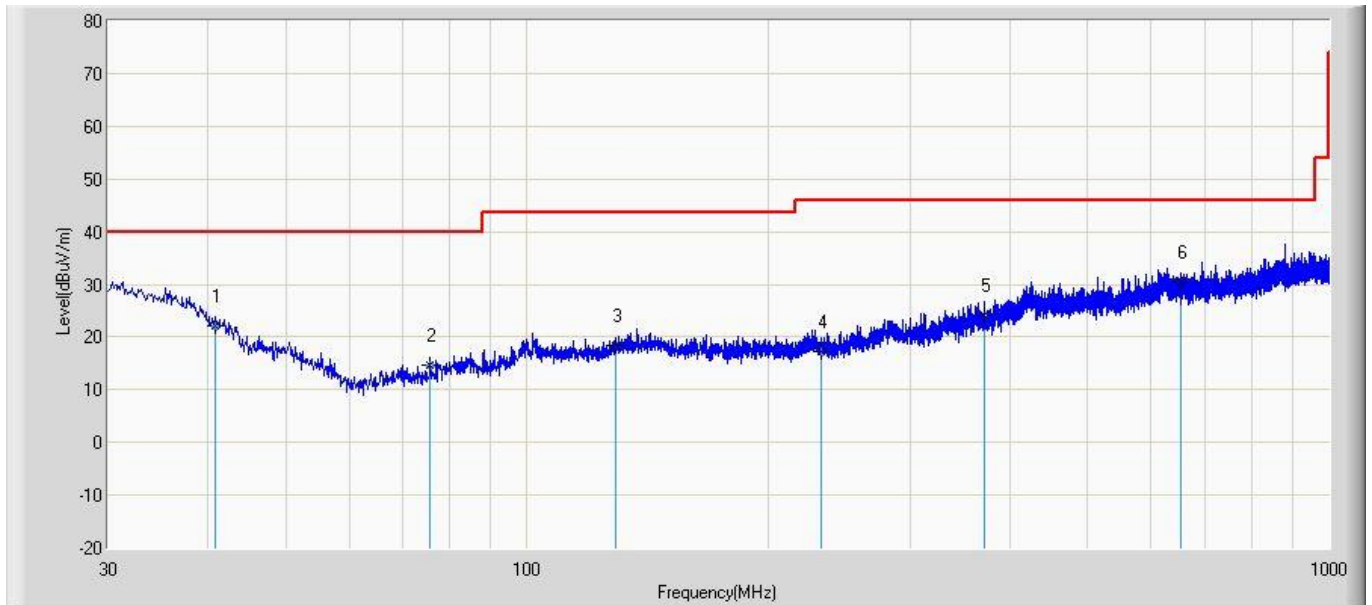
The worst case of Radiated Emission below 1GHz:

Profile: 2160271R	Page No.: 9
Engineer: YULIU	
Site: AC3	Time: 2021/09/08 - 05:04
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		33.638	21.125	-1.681	-18.875	40.000	22.807	QP
2		47.945	19.528	1.596	-20.472	40.000	17.932	QP
3	*	93.656	27.874	8.758	-15.626	43.500	19.116	QP
4		148.340	21.594	2.908	-21.906	43.500	18.686	QP
5		267.286	22.123	-0.587	-23.877	46.000	22.710	QP
6		464.196	27.566	2.191	-18.434	46.000	25.374	QP

Profile: 2160271R	Page No.: 10
Engineer: YULIU	
Site: AC3	Time: 2021/09/08 - 05:09
Limit: FCC_Part15.109_RE(3m)_ClassB	Margin: 0
Probe: AC3_3m (30-1000MHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Power: Battery: 3.7 V
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		40.791	22.125	0.925	-17.875	40.000	21.200	QP
2		75.711	14.548	3.005	-25.452	40.000	11.543	QP
3		128.697	18.259	1.331	-25.241	43.500	16.928	QP
4		232.973	17.249	-0.954	-28.751	46.000	18.203	QP
5		371.925	24.143	0.725	-21.857	46.000	23.418	QP
6	*	654.437	30.554	1.821	-15.446	46.000	28.733	QP

4.3 Emissions in non-restricted frequency band	VERDICT: PASS
---	----------------------

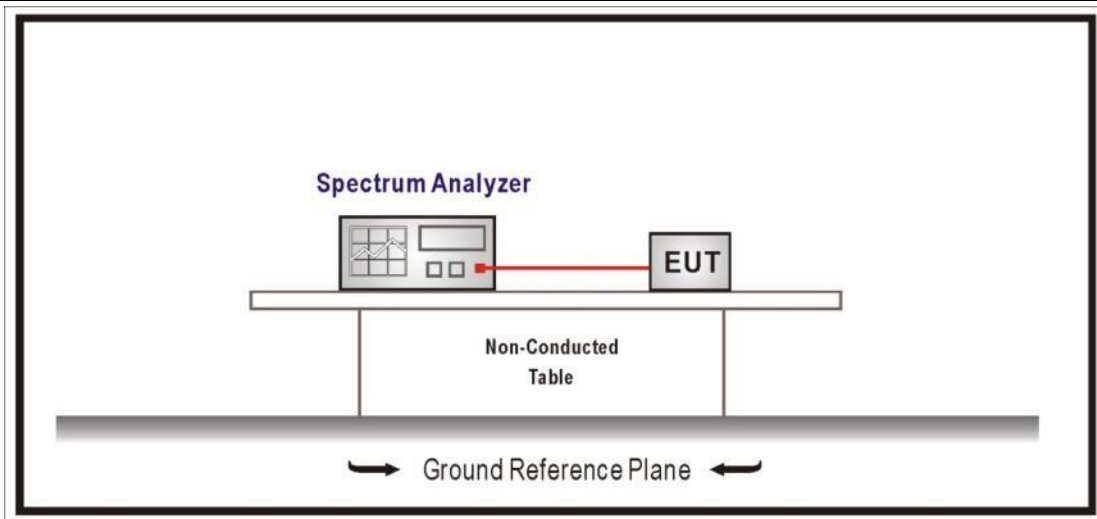
4.3.1 Limit

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

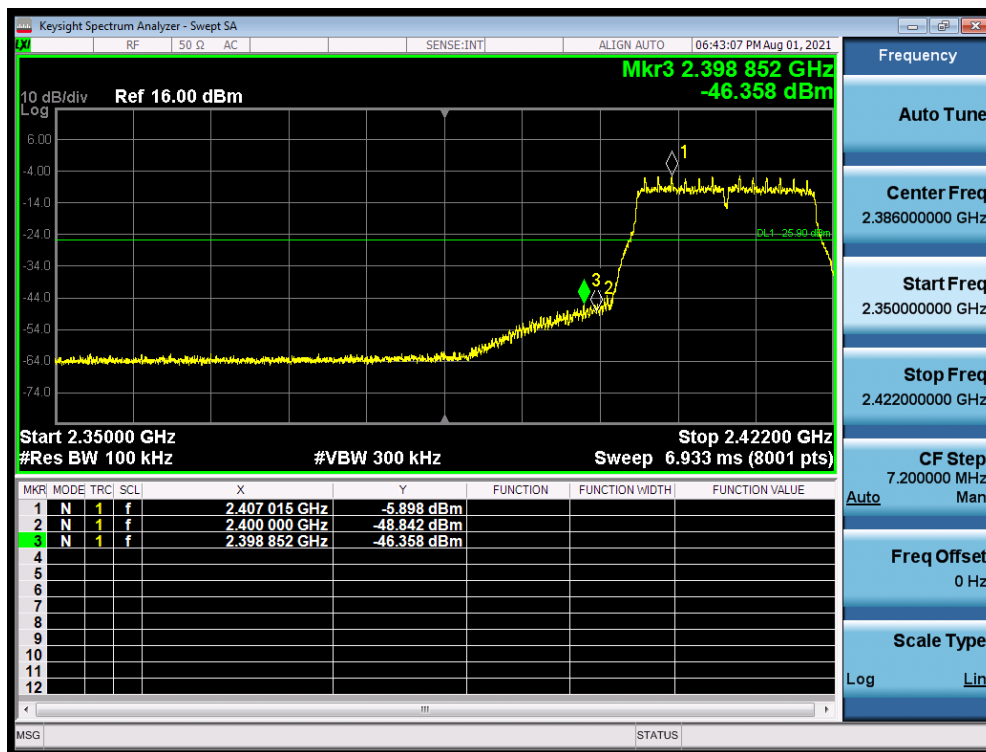
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.11	Emissions in non-restricted frequency bands
<input checked="" type="checkbox"/>	ANSI C63.10	11.11.1	General
<input checked="" type="checkbox"/>	ANSI C63.10	11.11.2	Reference level measurement
<input checked="" type="checkbox"/>	ANSI C63.10	11.11.3	Emission level measurement

4.3.4 Test Data

Mode	Channel	Test Frequency (MHz)	Maximum In-Band PSD[a] (dBm/100kHz)	Frequency (MHz)	Out-Band PSD[b] (dBm/100kHz)	[a]-[b] (dB)	Limit (dB)	Result
1	1	2412	-3.621	2400.000	-51.145	47.524	≥20	Pass
	11	2462	-3.509	2500.000	-63.743	60.234	≥20	Pass
2	1	2412	-5.898	2400.000	-48.842	42.944	≥20	Pass
	11	2462	-5.655	2500.000	-61.068	55.413	≥20	Pass
3	1	2412	-5.964	2400.000	-46.971	41.007	≥20	Pass
	11	2462	-5.987	2500.000	-62.012	56.025	≥20	Pass

Note: The worst case of emissions in non-restricted frequency bands as below:

Mode 2 CH01(2412MHz)



4.4 Radiated Emission Band Edge	VERDICT: PASS
--	----------------------

4.4.1 Limit

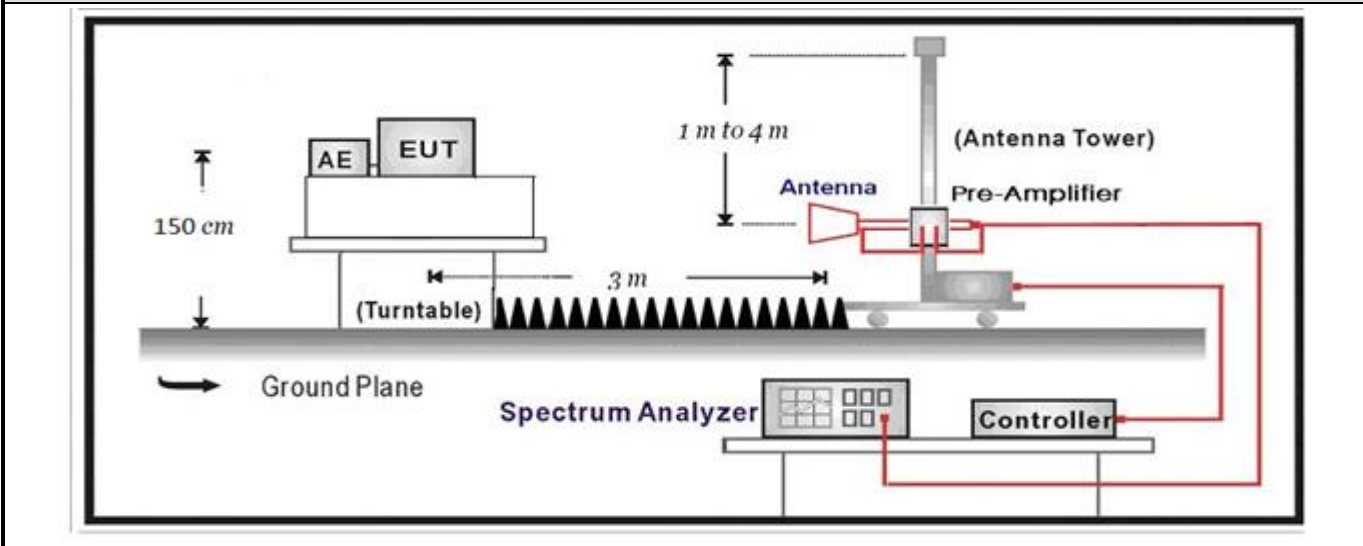
Standard FCC Part 15 Subpart C Paragraph 15.247(d) , 15.205, 15.209

Frequency bands (MHz)	Detector	Limit (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

Above 1GHz Test Setup:



4.4.3 Test Procedure			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	6.10	Band-edge testing
	<input checked="" type="checkbox"/> ANSI C63.10	6.10.5	Restricted-band band-edge measurements
	<input type="checkbox"/> ANSI C63.10	6.10.6	Marker-delta method
<input checked="" type="checkbox"/>	ANSI C63.10	11.12	Emissions in restricted frequency bands
	<input checked="" type="checkbox"/> ANSI C63.10	11.12.1	Radiated emission measurements
	<input checked="" type="checkbox"/> ANSI C63.10	6.3	Radiated spurious emission test
<input type="checkbox"/>	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
<input type="checkbox"/>	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
<input checked="" type="checkbox"/>	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz
	<input type="checkbox"/> ANSI C63.10	11.12.2	Antenna-port conducted measurements
	<input type="checkbox"/> ANSI C63.10	11.12.2.3	Quasi-peak measurement procedure
	<input type="checkbox"/> ANSI C63.10	11.12.2.4	Peak power measurement procedure
	<input type="checkbox"/> ANSI C63.10	11.12.2.5	Average power measurement procedures
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.1	Trace averaging with continuous EUT transmission at full power
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.2	Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction
	<input type="checkbox"/> ANSI C63.10	11.12.2.5.3	Reduced VBW averaging across ON and OFF times of the EUT transmissions with max hold

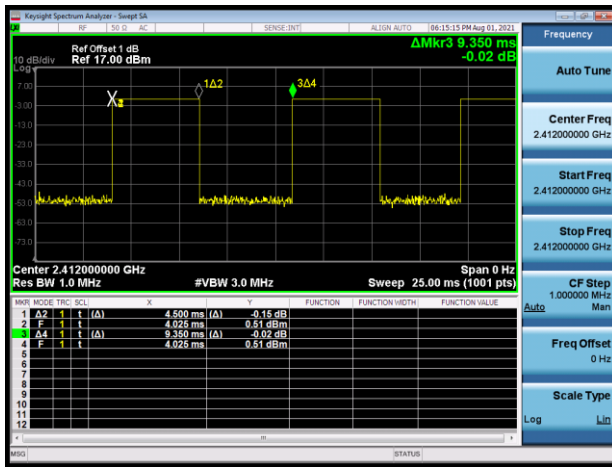
4.4.4 Test Data

Test Mode	Tx On (ms)	VBW (Hz)	Tx On + Tx Off (ms)	Duty Cycle (%)
1	4.50	10	9.350	48.13
2	2.07	10	5.175	40.00
3	1.92	10	5.415	35.46

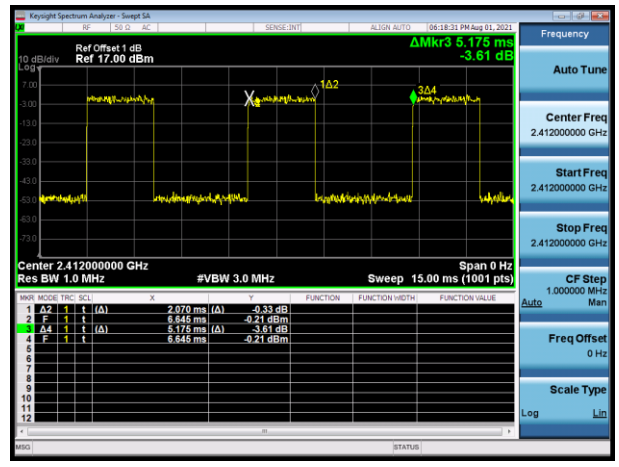
Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Note 2: According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: $VBW \geq 1/T$ will be used.

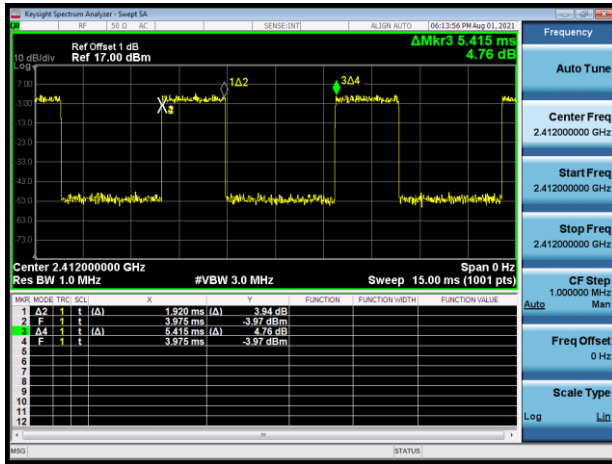
802.11b



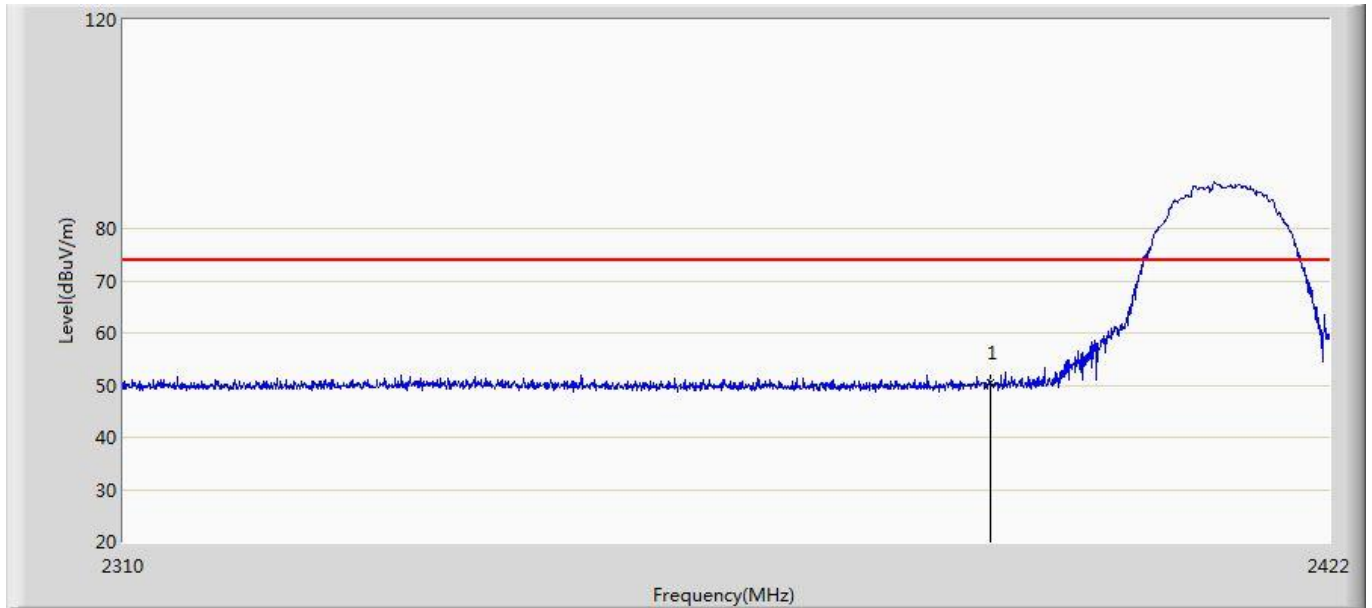
802.11g



802.11n(20MHz)

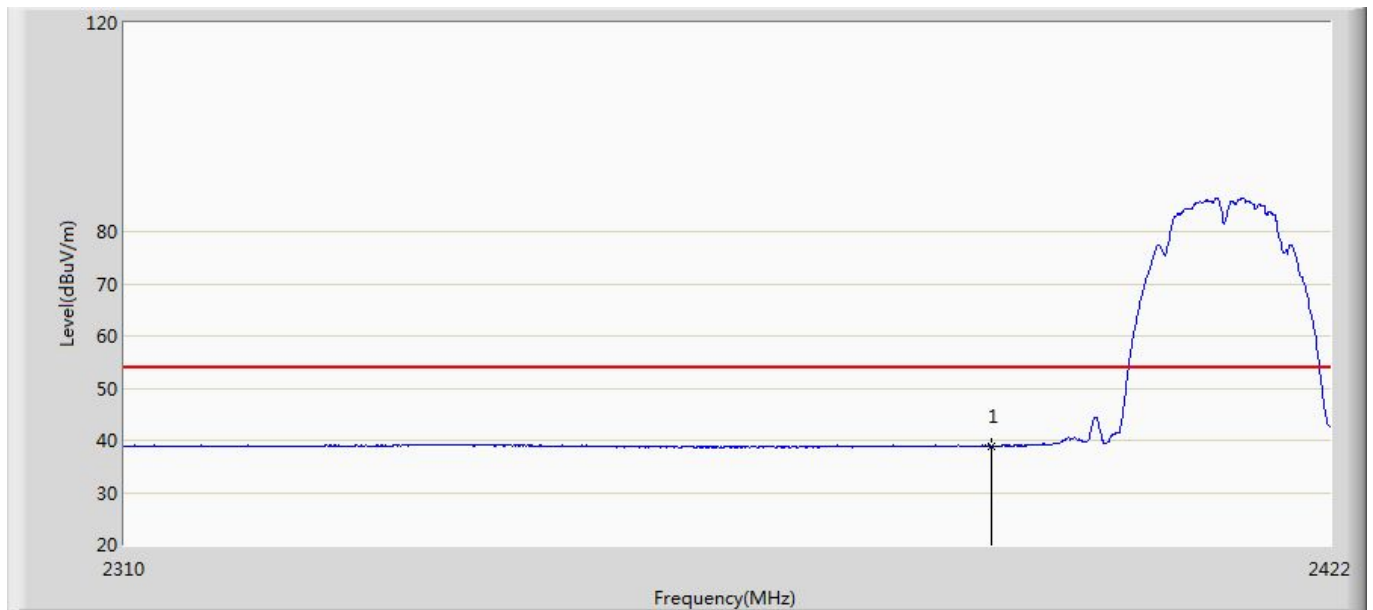


Profile: 2160271R	Page No.: 1
Engineer: YULIU	
Site: AC5	Time: 2020/03/12 - 00:39
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



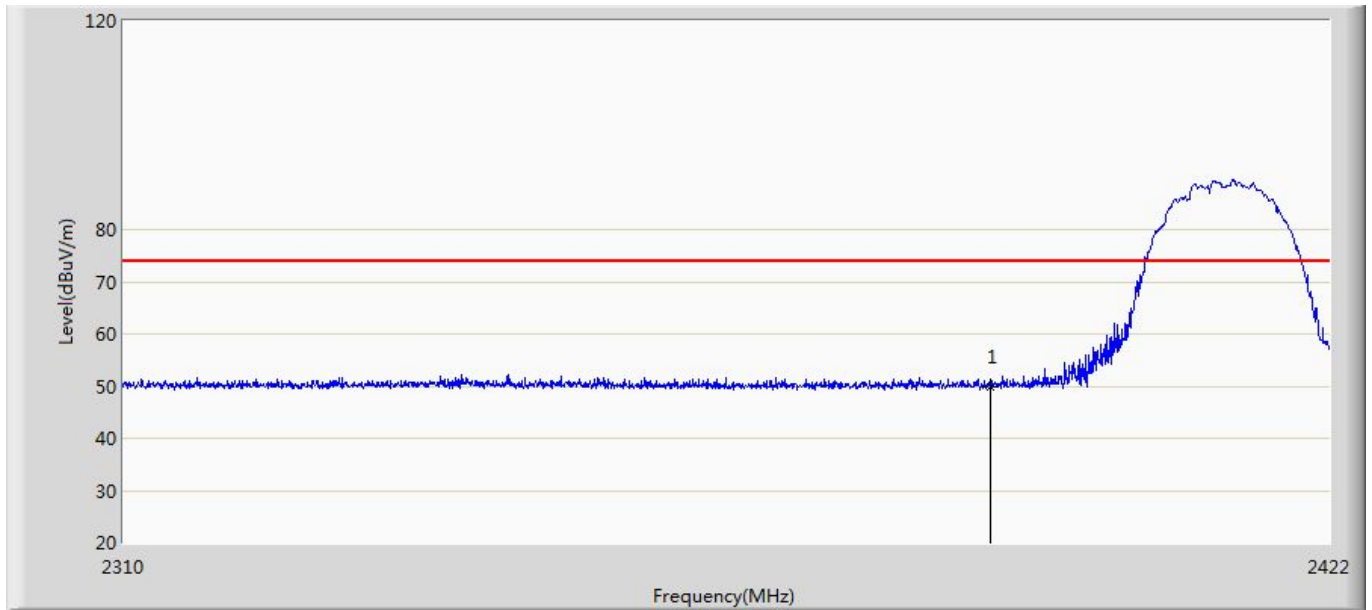
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.564	14.208	-23.436	74.000	36.357	PK

Profile: 2160271R	Page No.: 2
Engineer: YULIU	
Site: AC5	Time: 2020/04/28 - 20:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



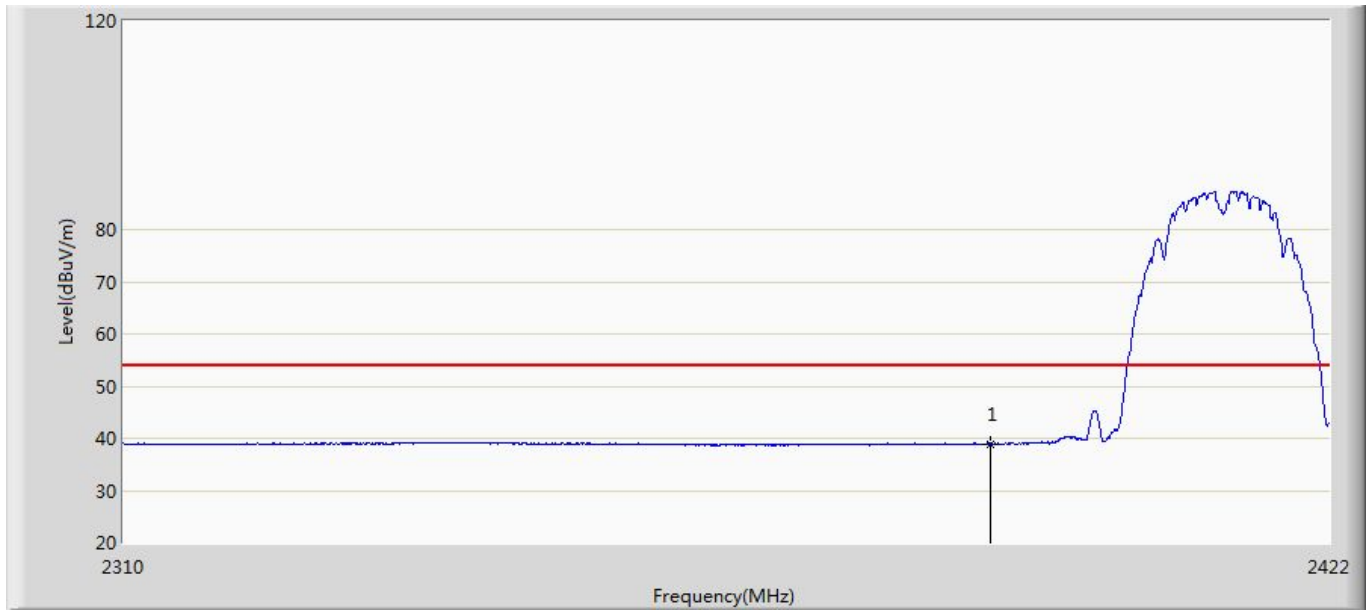
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	38.877	2.521	-15.123	54.000	36.357	AV

Profile: 2160271R	Page No.: 3
Engineer: YULIU	
Site: AC5	Time: 2020/04/28 - 20:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



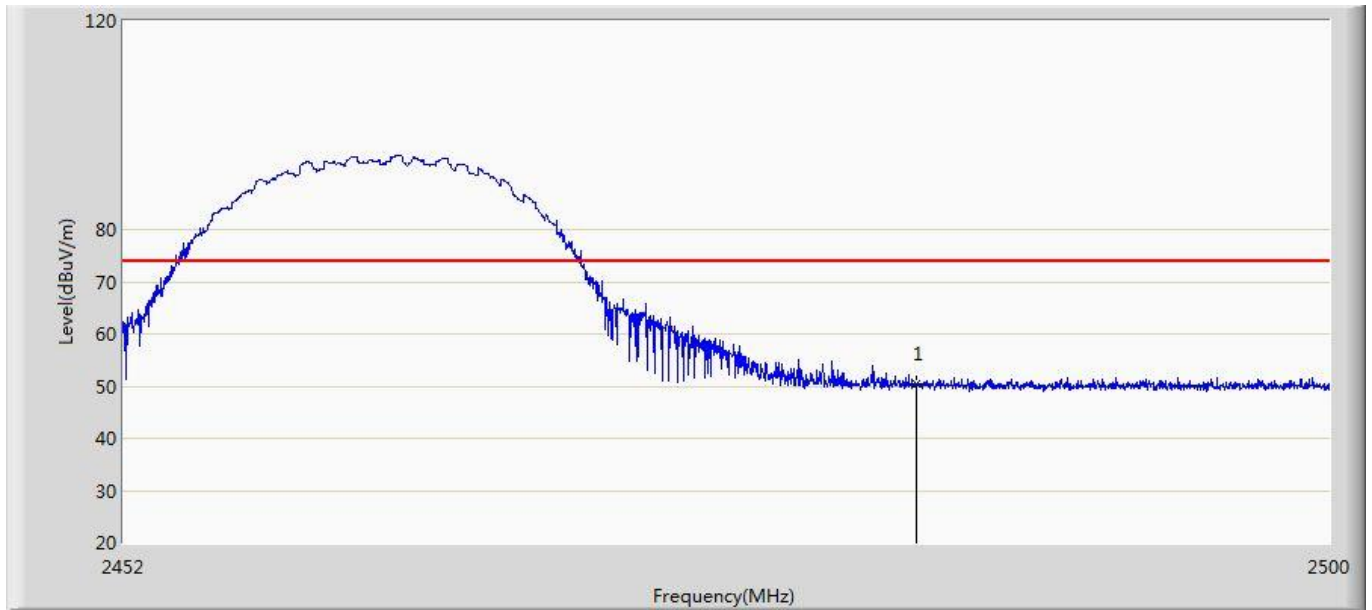
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	49.840	13.484	-24.160	74.000	36.357	PK

Profile: 2160271R	Page No.: 4
Engineer: YULIU	
Site: AC5	Time: 2020/04/28 - 20:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2412MHz by 802.11b	



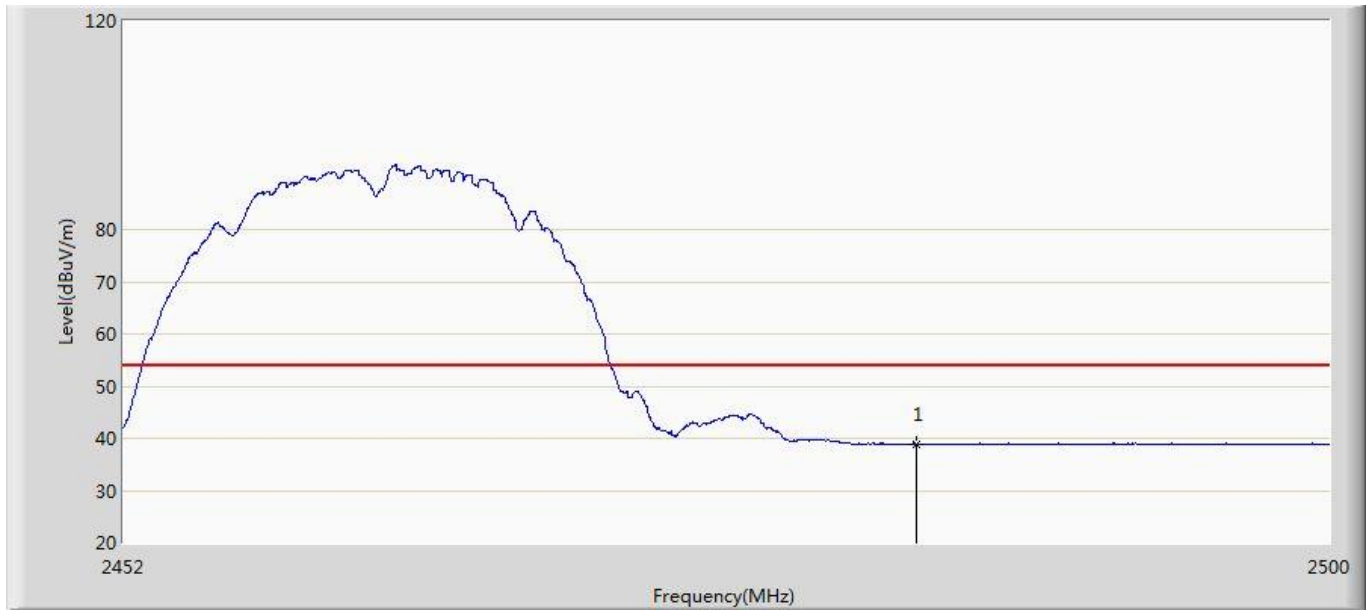
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	38.955	2.599	-15.045	54.000	36.357	AV

Profile: 2160271R	Page No.: 5
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



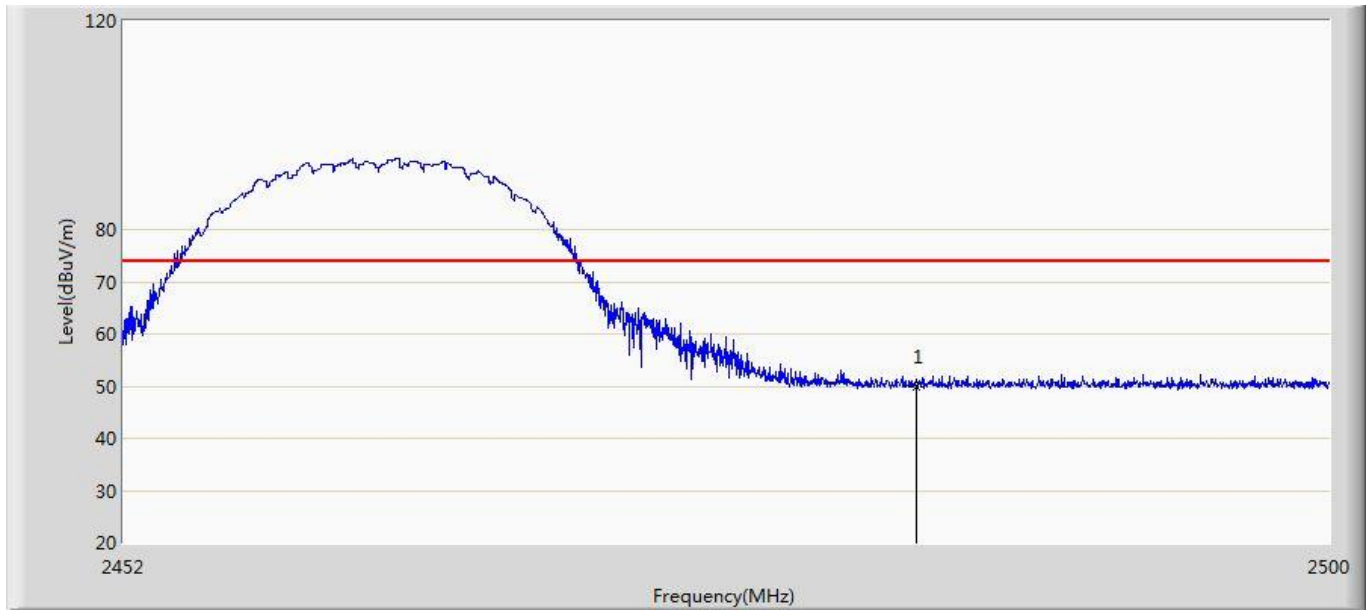
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	50.307	13.903	-23.693	74.000	36.404	PK

Profile: 2160271R	Page No.: 6
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:47
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



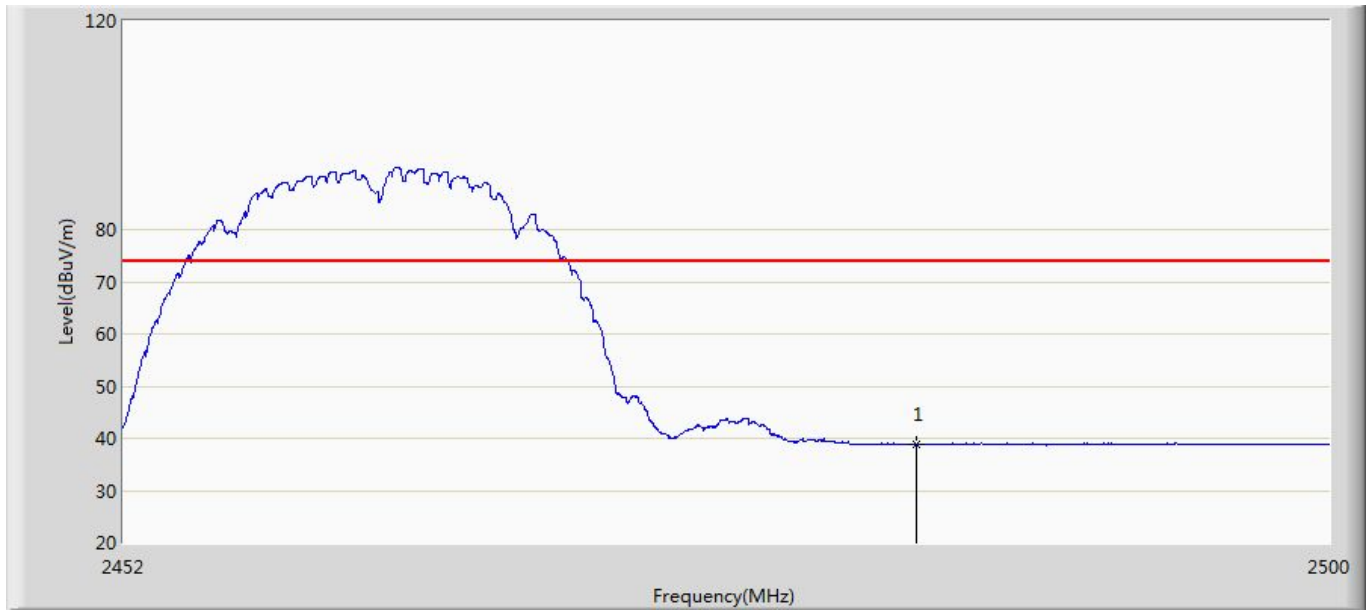
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	38.914	2.510	-15.086	54.000	36.404	AV

Profile: 2160271R	Page No.: 7
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



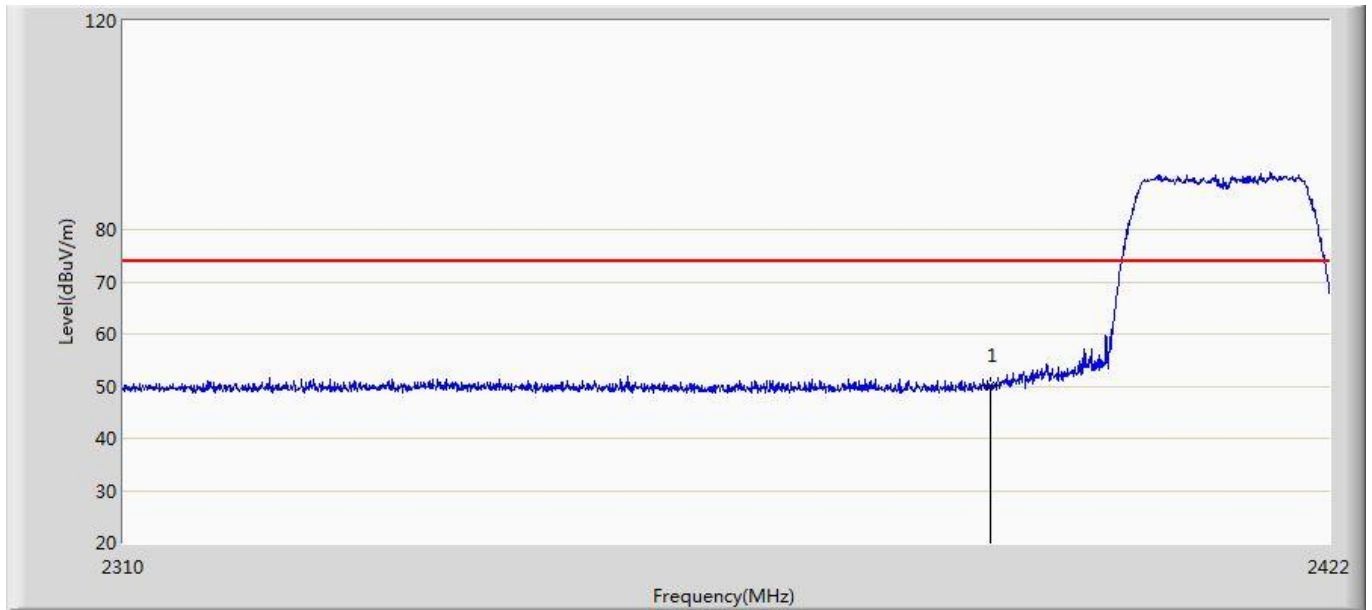
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	49.957	13.553	-24.043	74.000	36.404	PK

Profile: 2160271R	Page No.: 8
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 1:Transmit at 2462MHz by 802.11b	



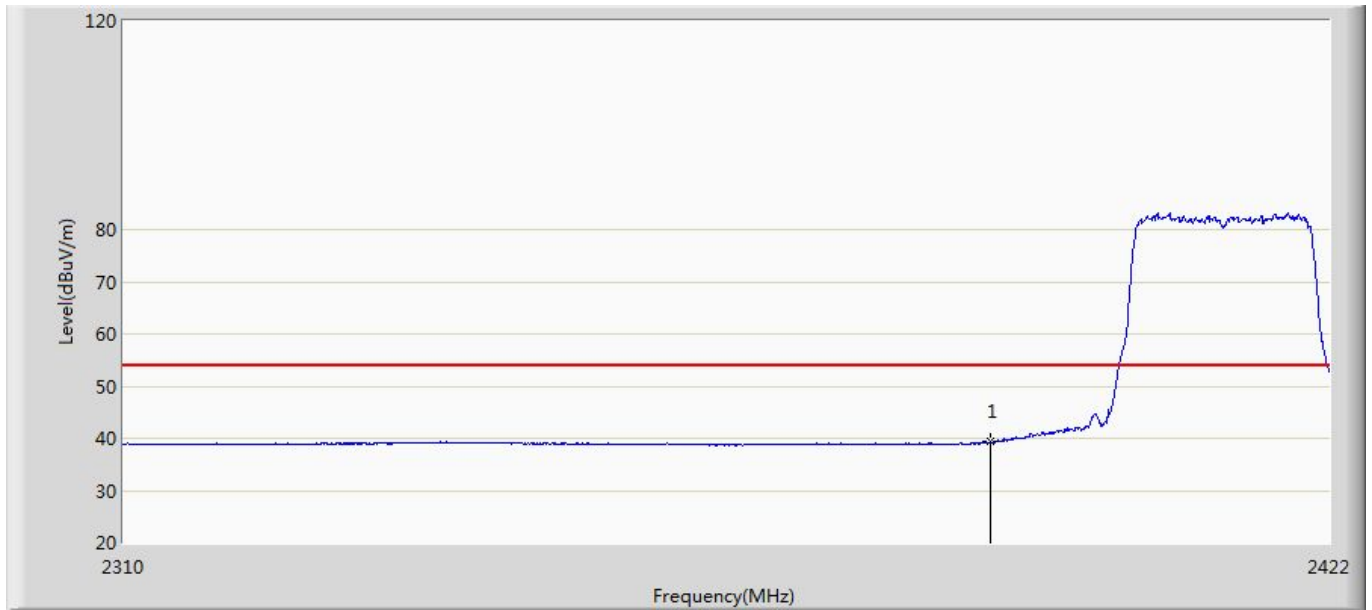
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	38.853	2.449	-35.147	74.000	36.404	PK

Profile: 2160271R	Page No.: 9
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



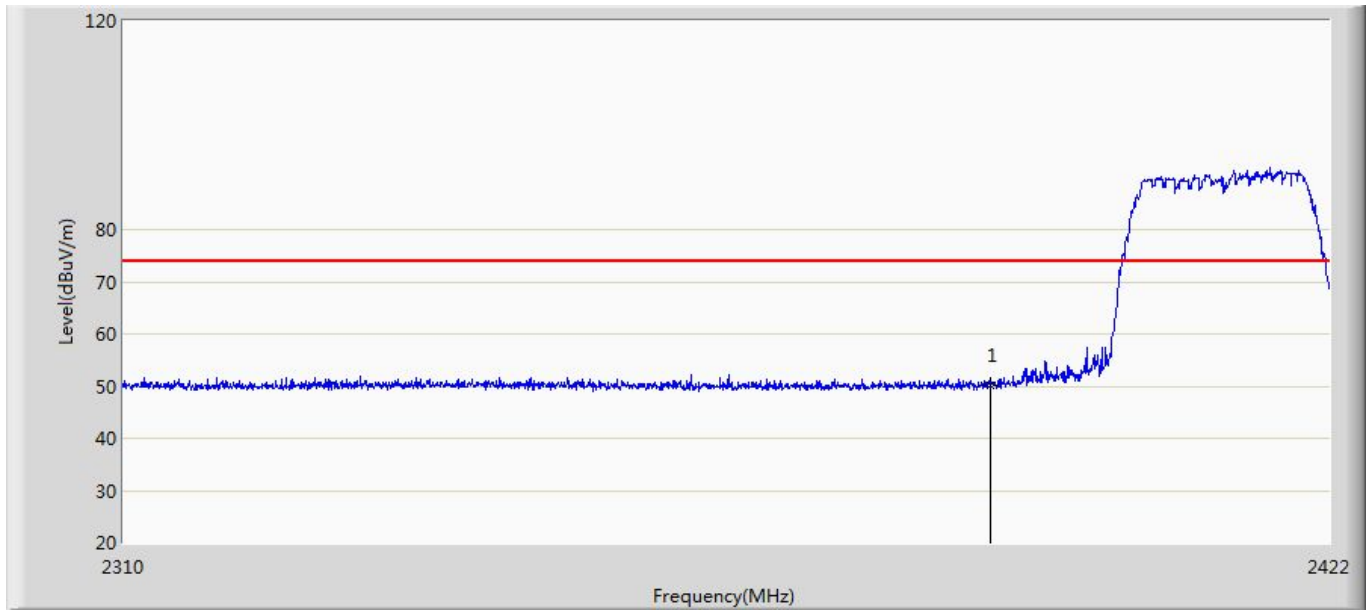
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.066	13.710	-23.934	74.000	36.357	PK

Profile: 2160271R	Page No.: 10
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



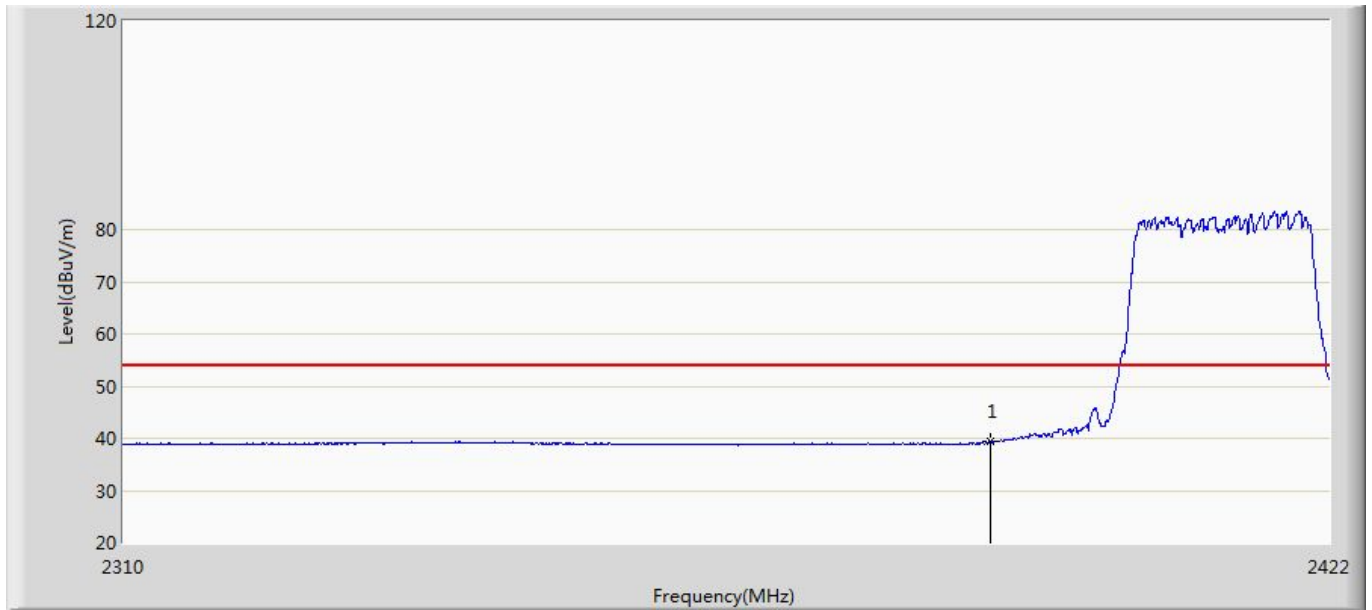
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.294	2.938	-14.706	54.000	36.357	AV

Profile: 2160271R	Page No.: 11
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 21:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



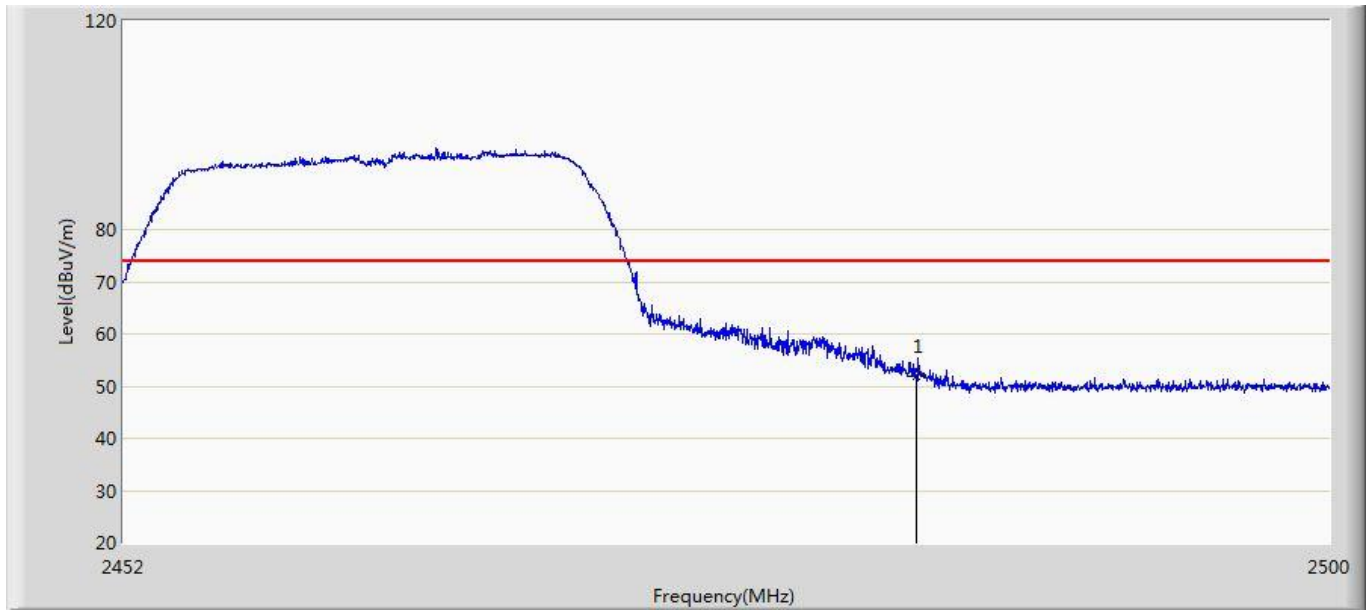
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.126	13.770	-23.874	74.000	36.357	PK

Profile: 2160271R	Page No.: 12
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2412MHz by 802.11g	



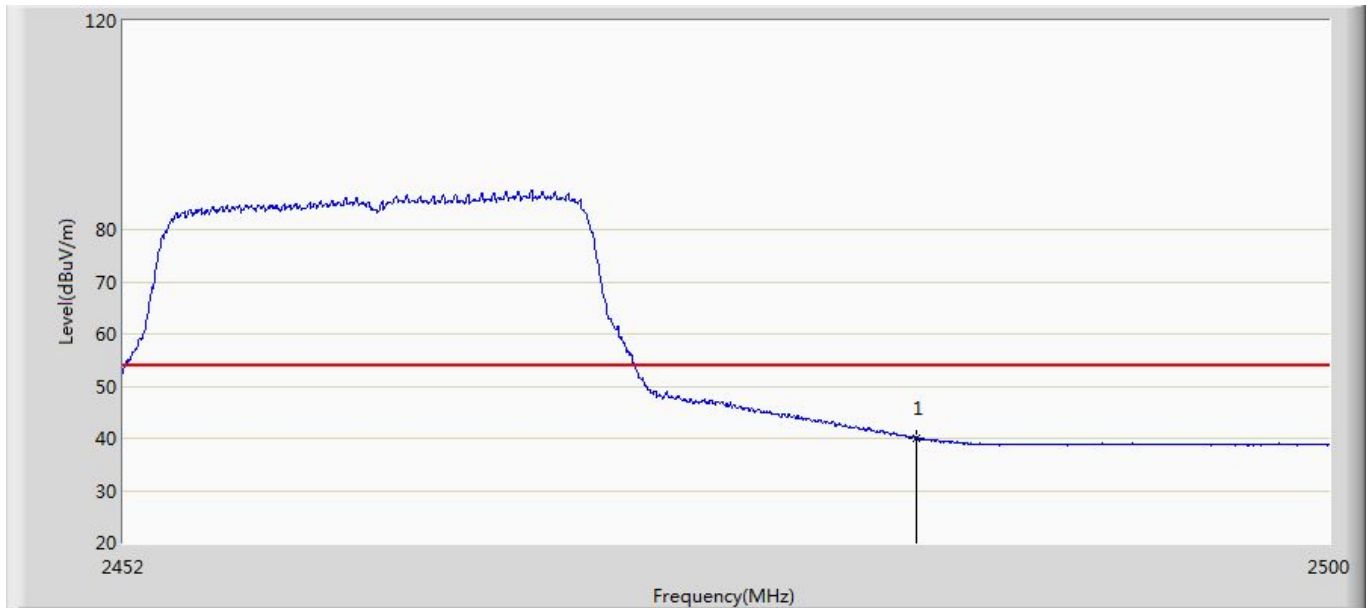
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.434	3.078	-14.566	54.000	36.357	AV

Profile: 2160271R	Page No.: 13
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



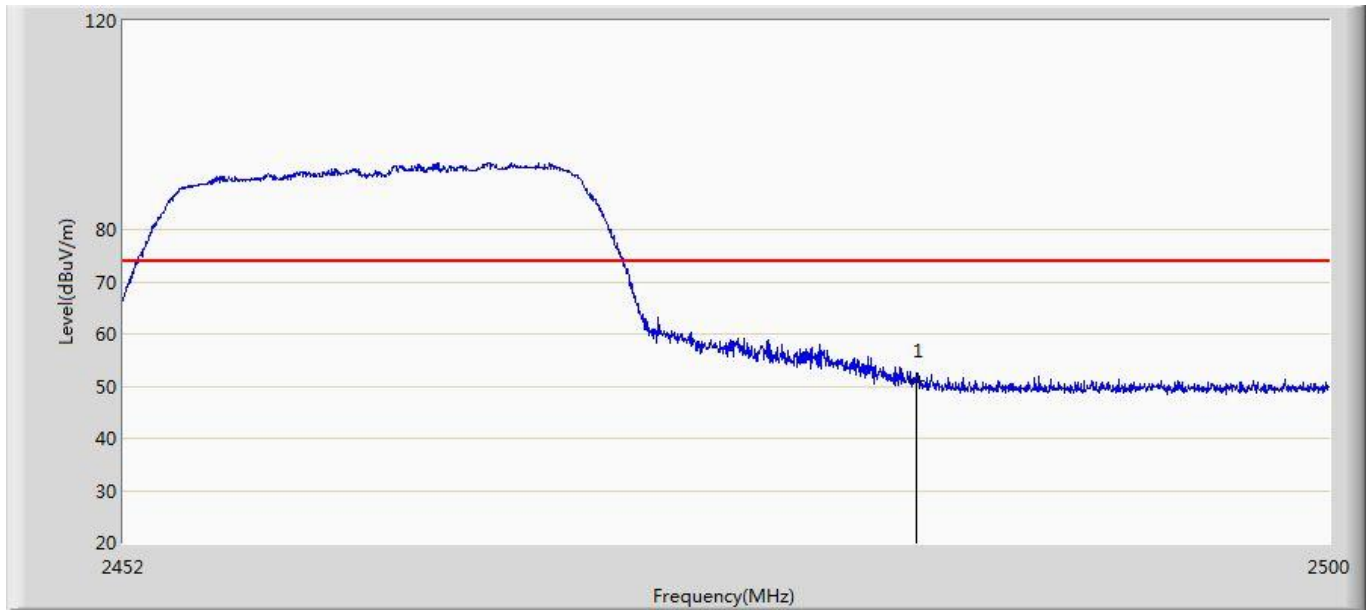
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	51.900	15.496	-22.100	74.000	36.404	PK

Profile: 2160271R	Page No.: 14
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:05
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



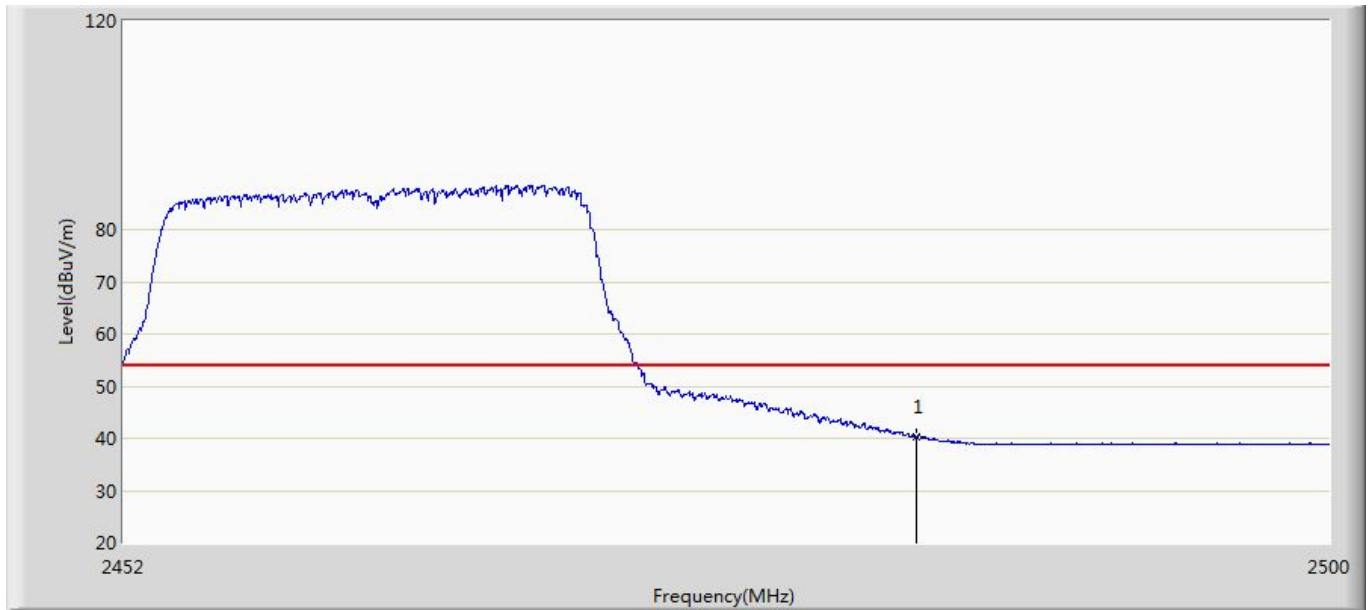
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.135	3.731	-13.865	54.000	36.404	AV

Profile: 2160271R	Page No.: 15
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



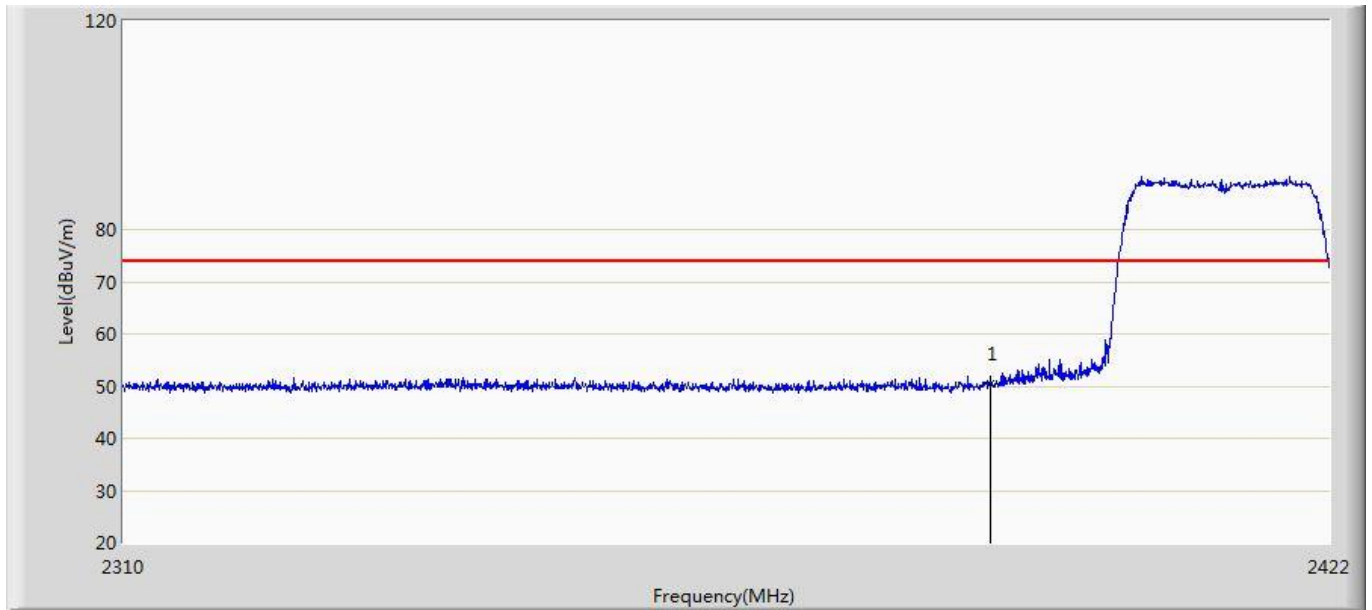
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	51.104	14.700	-22.896	74.000	36.404	PK

Profile: 2160271R	Page No.: 16
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 2:Transmit at 2462MHz by 802.11g	



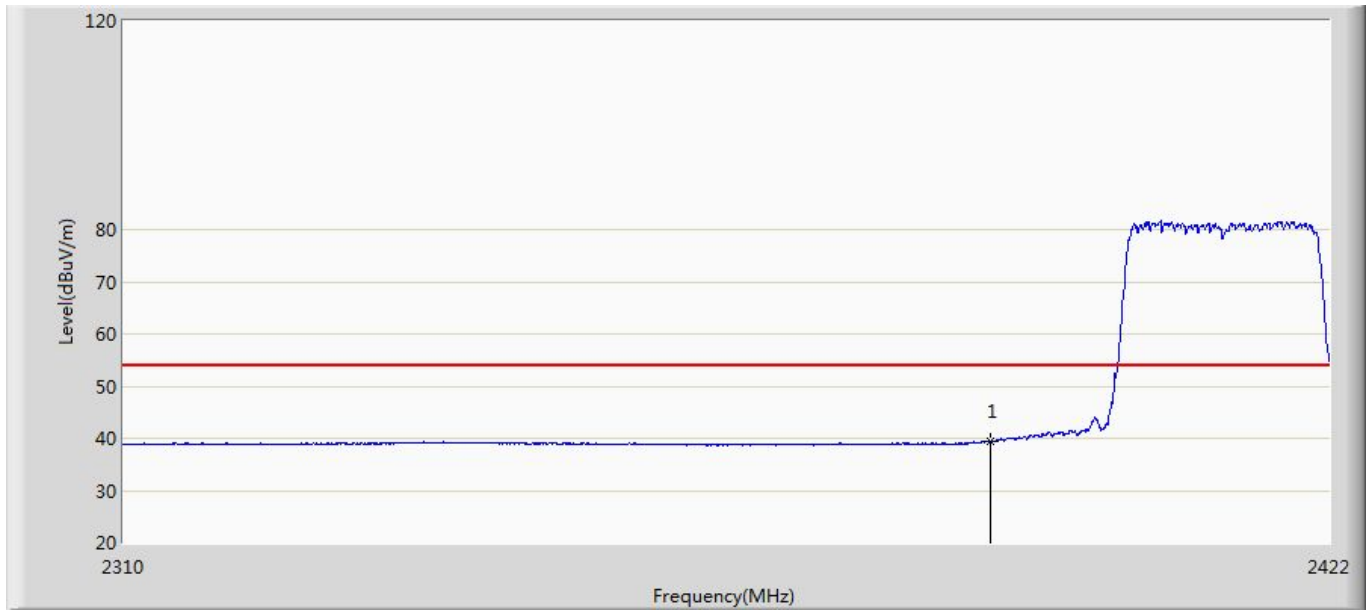
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.146	3.742	-13.854	54.000	36.404	AV

Profile: 2160271R	Page No.: 17
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



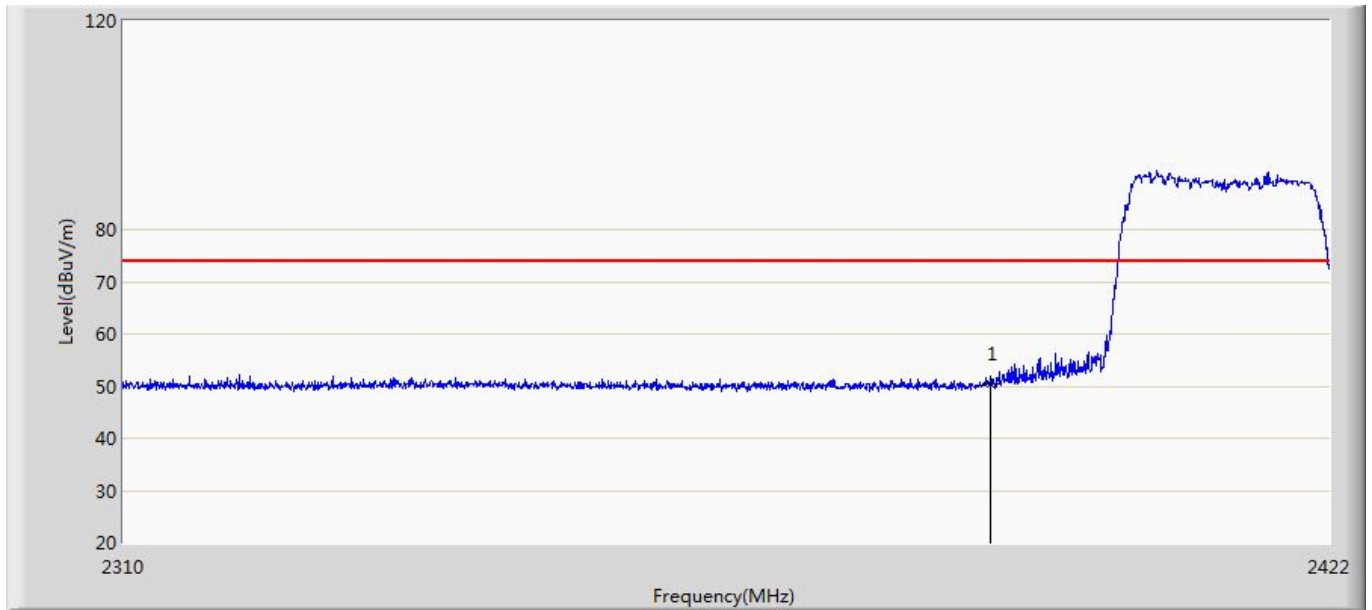
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.473	14.117	-23.527	74.000	36.357	PK

Profile: 2160271R	Page No.: 18
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



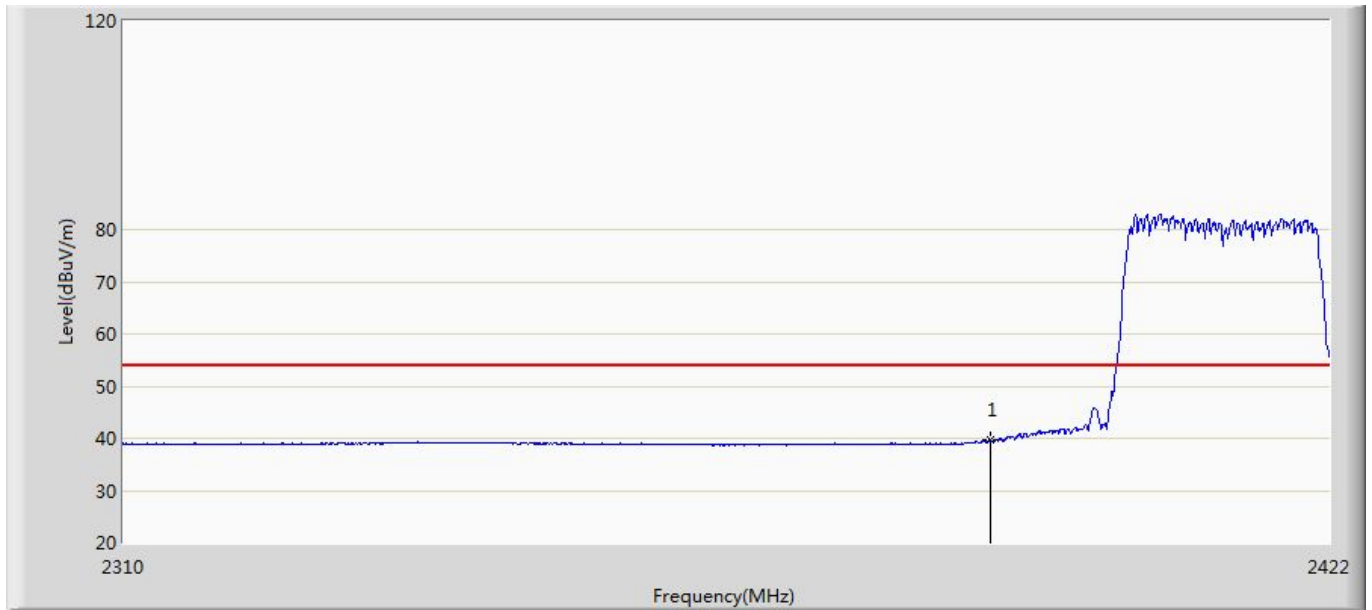
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.454	3.098	-14.546	54.000	36.357	AV

Profile: 2160271R	Page No.: 19
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



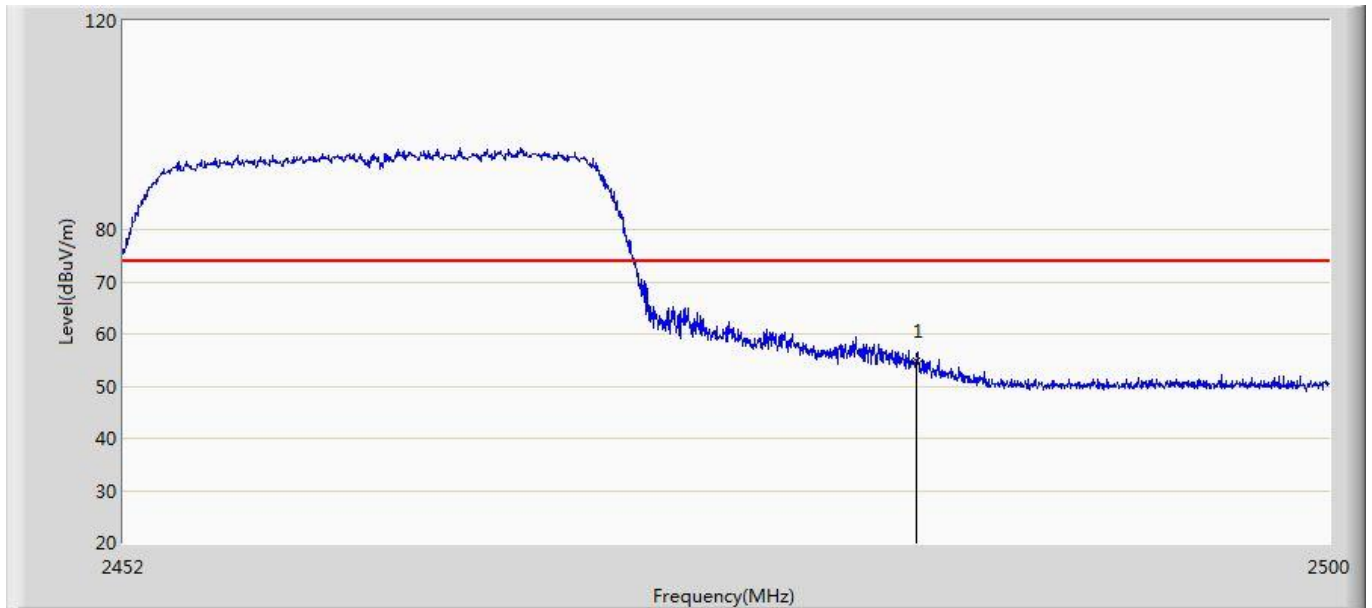
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	50.408	14.052	-23.592	74.000	36.357	PK

Profile: 2160271R	Page No.: 20
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:20
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2412MHz by 802.11n	



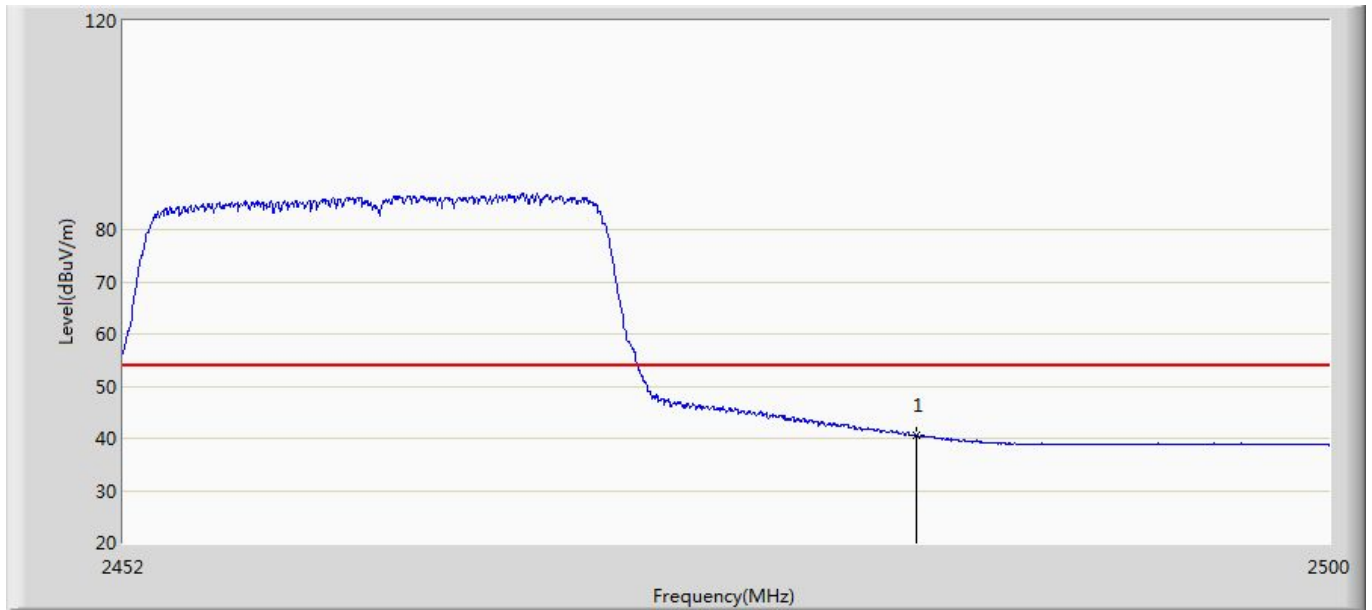
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.700	3.344	-14.300	54.000	36.357	AV

Profile: 2160271R	Page No.: 21
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



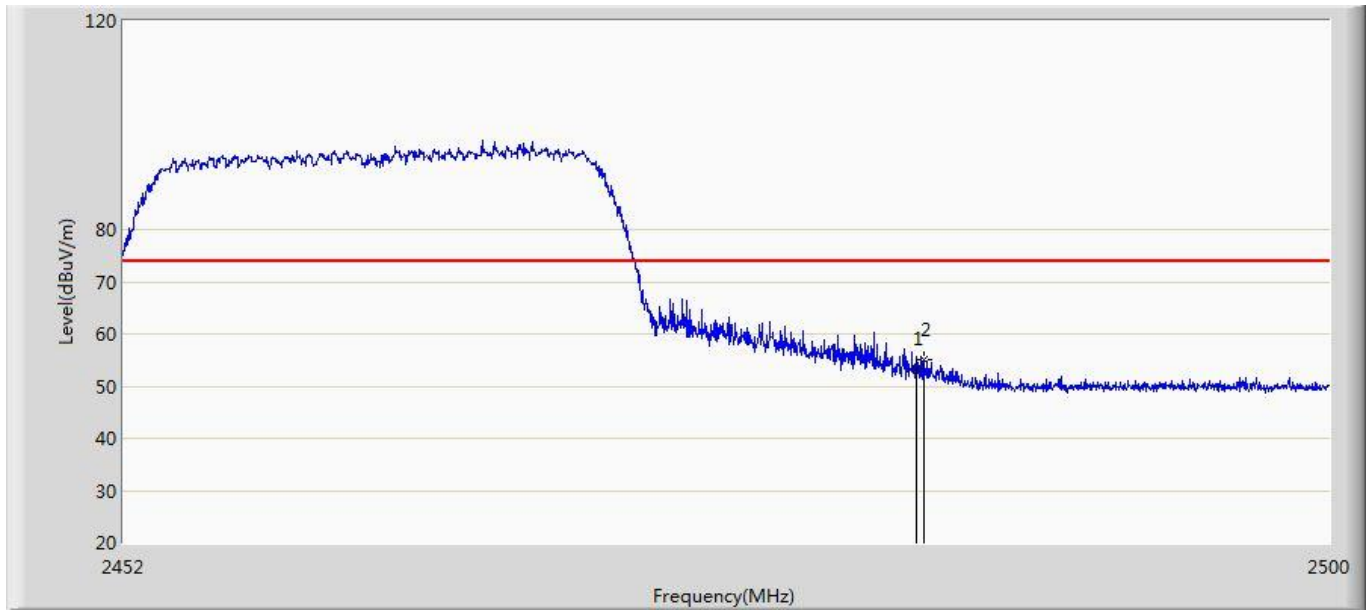
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	54.726	18.322	-19.274	74.000	36.404	PK

Profile: 2160271R	Page No.: 22
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



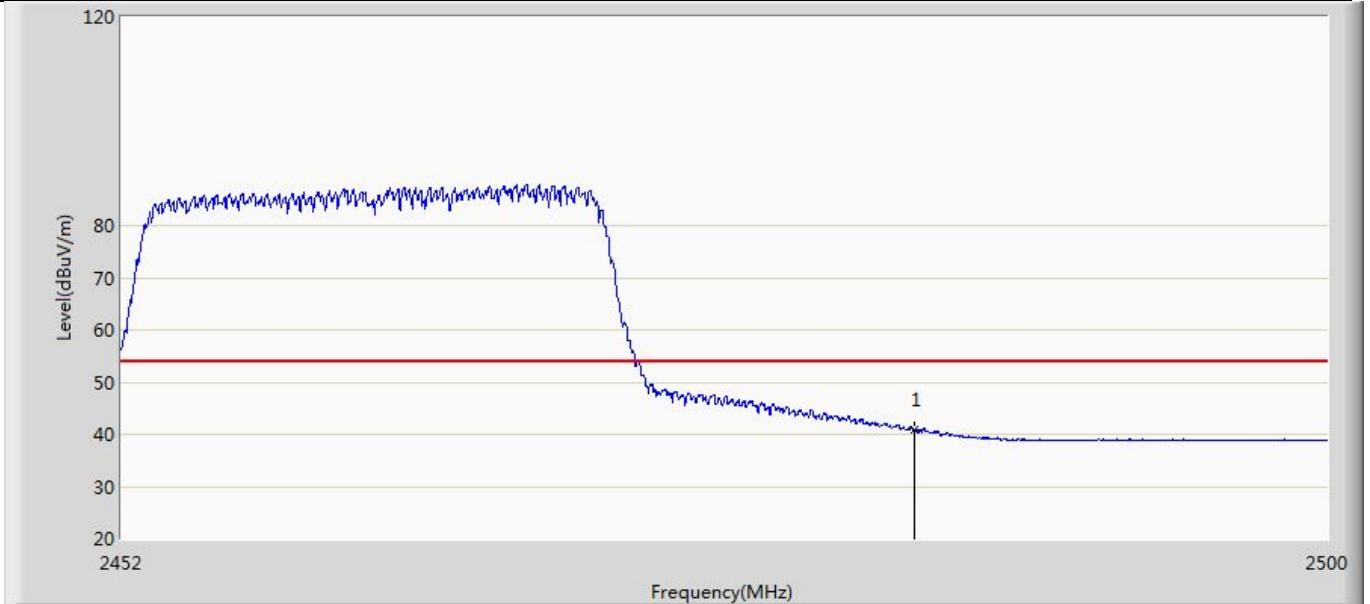
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.522	4.118	-13.478	54.000	36.404	AV

Profile: 2160271R	Page No.: 23
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		2483.500	53.451	17.047	-20.549	74.000	36.404	PK
2	*	2483.752	55.002	18.598	-18.998	74.000	36.404	PK

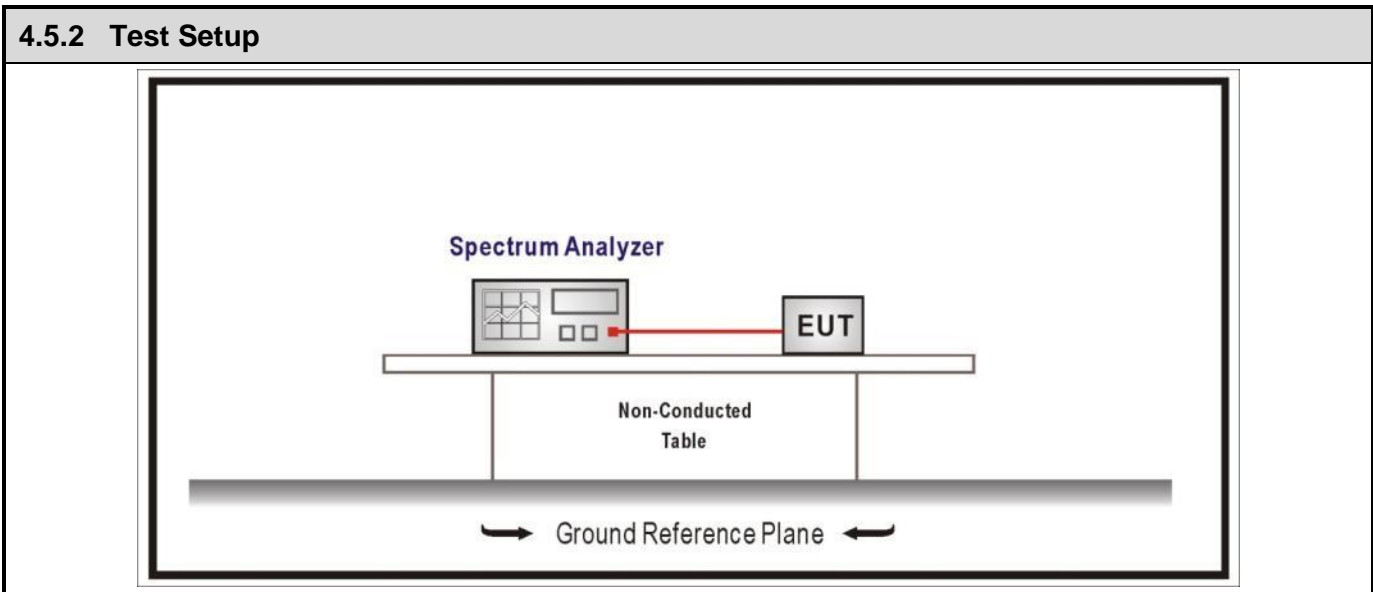
Profile: 2160271R	Page No.: 24
Engineer: YULIU	
Site: AC5	Time: 2021/08/26 - 22:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: HANDHELD THERMAL BINOCULARS	Battery: 3.7 V
Note: Mode 3:Transmit at 2462MHz by 802.11n	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.782	4.378	-13.218	54.000	36.404	AV

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	
Standard	ANSI C63.10 Paragraph 6.7
The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs. The occupied bandwidth should be within the required frequency range.	



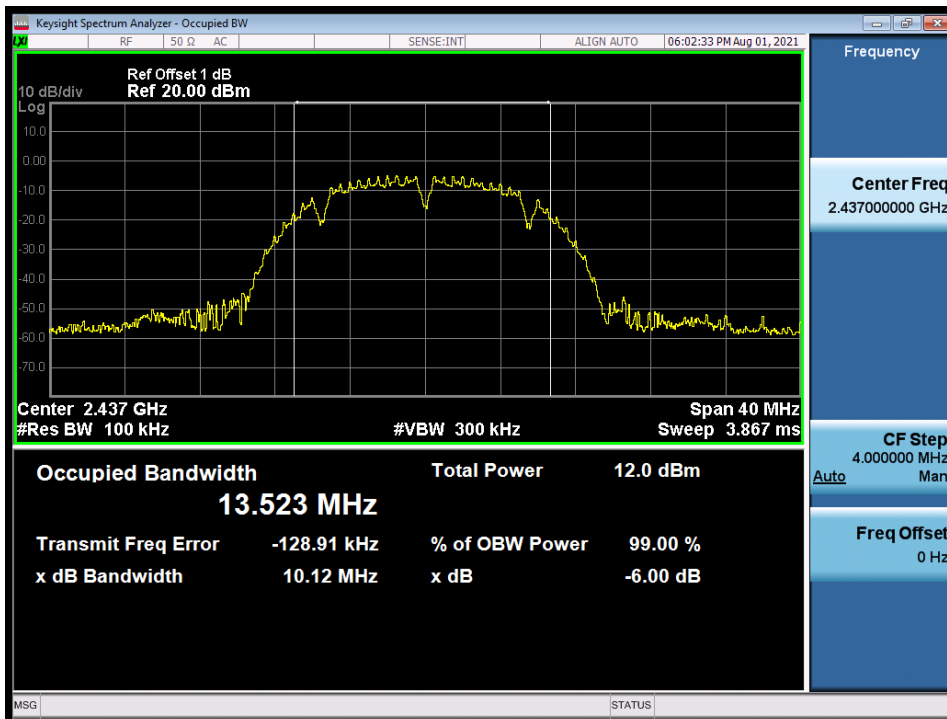
4.5.3 Test Procedure			
	Reference Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.8	DTS bandwidth
<input type="checkbox"/>	ANSI C63.10	11.8.1	Option 1
<input checked="" type="checkbox"/>	ANSI C63.10	11.8.2	Option 2
<input checked="" type="checkbox"/>	ANSI C63.10	6.9	Occupied bandwidth
<input type="checkbox"/>	ANSI C63.10	6.9.2	relative measurement procedure
<input checked="" type="checkbox"/>	ANSI C63.10	6.9.3	power bandwidth (99%) measurement procedure

4.5.4 Test Data

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	Limit (kHz)	Result
1	1	2412	10.10	≥500	Pass
	6	2437	10.12	≥500	Pass
	11	2462	10.09	≥500	Pass
2	1	2412	16.37	≥500	Pass
	6	2437	16.37	≥500	Pass
	11	2462	16.47	≥500	Pass
3	1	2412	17.64	≥500	Pass
	6	2437	17.69	≥500	Pass
	11	2462	17.67	≥500	Pass

Note: The worst case of Occupied Bandwidth as below:

6dB Occupied Bandwidth
Mode 1 CH06 (2437MHz)



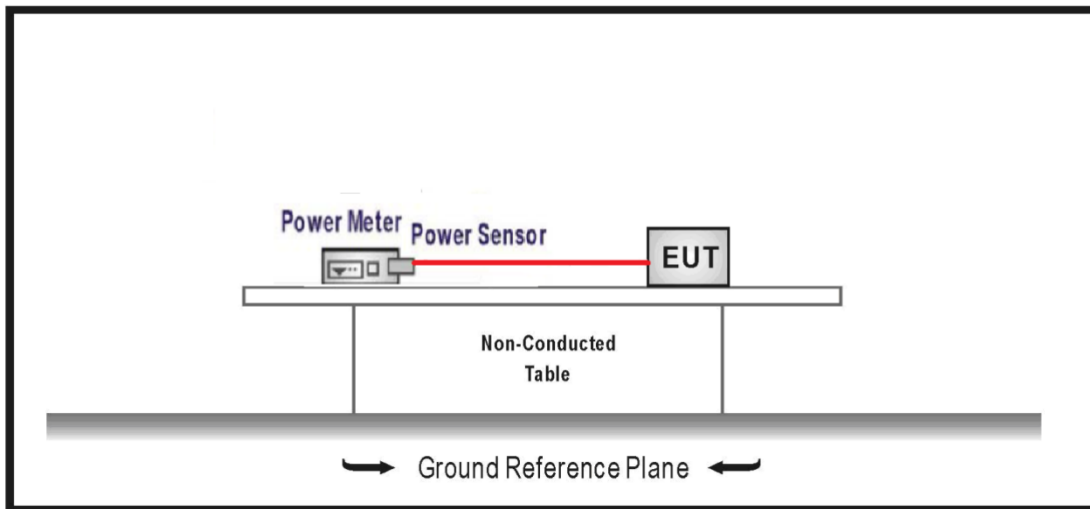
4.6 Fundamental emission output power	VERDICT: PASS
--	----------------------

4.6.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)	
<input checked="" type="checkbox"/>	GTX <6dBi	Pout≤30dBm
<input type="checkbox"/>	GTX >6dBi	
<input type="checkbox"/>	Non-Fix point-point	Pout≤30-(GTX -6)
<input type="checkbox"/>	Fix point-point	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Point-to-multipoint	Pout≤30-(GTX-6)
<input type="checkbox"/>	Overlap Beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	Aggregate power transmitted simultaneously on all beams	Pout≤30-[(GTX-6)]/3
<input type="checkbox"/>	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



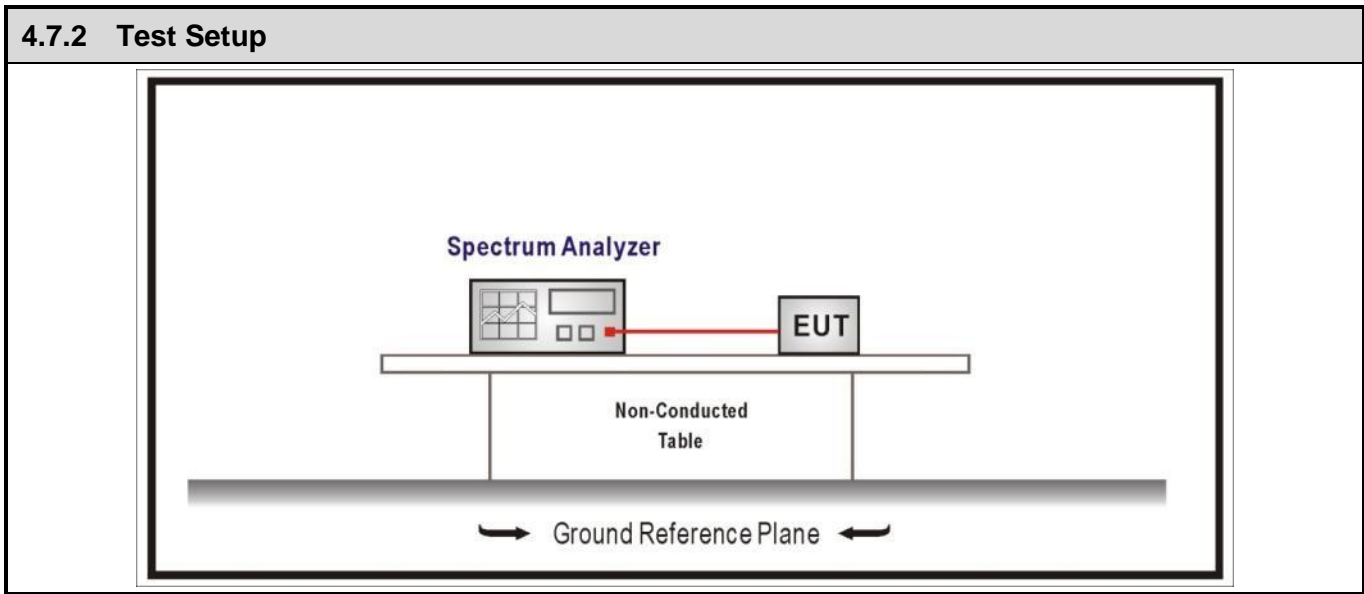
4.6.3 Test Procedure					
	References Rule		Chapter	Description	
<input checked="" type="checkbox"/>	ANSI C63.10		11.9	Fundamental emission output power	
	<input checked="" type="checkbox"/>	ANSI C63.10	11.9.1	Maximum peak conducted output power	
	<input type="checkbox"/>	ANSI C63.10	11.9.1.1	RBW ≥ DTS bandwidth	
	<input type="checkbox"/>	ANSI C63.10	11.9.1.2	Integrated band power method	
	<input checked="" type="checkbox"/>	ANSI C63.10	11.9.1.3	PKPM1 Peak power meter method	
	<input type="checkbox"/>	ANSI C63.10		11.9.2	Maximum conducted (average) output power
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2	Measurement using a spectrum analyzer (SA)	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.2	Method AVGSA-1(Duty cycle≥98%)	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.3	Method AVGSA-1A(Duty cycle≥98%)	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.4	Method AVGSA-2(Duty cycle≤98%)	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.5	Method AVGSA-2A(Duty cycle≤98%)	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.4	Method AVGSA-3	
	<input type="checkbox"/>	ANSI C63.10	11.9.2.2.5	Method AVGSA-3A	
	<input type="checkbox"/>	ANSI C63.10		11.9.2.3	Measurement using a power meter (PM)
	<input type="checkbox"/>	ANSI C63.10	11.9.2.3.1	Method AVGPM	
<input type="checkbox"/>	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	1	2412	9.34	12.34	≤30	≤36	Pass
	6	2437	9.38	12.38	≤30	≤36	Pass
	11	2462	9.25	12.25	≤30	≤36	Pass
Mode 2	1	2412	9.33	12.33	≤30	≤36	Pass
	6	2437	9.42	12.42	≤30	≤36	Pass
	11	2462	9.36	12.36	≤30	≤36	Pass
Mode 3	1	2412	9.28	12.28	≤30	≤36	Pass
	6	2437	9.34	12.34	≤30	≤36	Pass
	11	2462	9.31	12.31	≤30	≤36	Pass

4.7 Power Density	VERDICT: PASS
--------------------------	----------------------

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



4.7.3 Test Procedure			
	References Rule	Chapter	Description
<input checked="" type="checkbox"/>	ANSI C63.10	11.10	Maximum power spectral density level in the fundamental emission
<input checked="" type="checkbox"/>	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
<input type="checkbox"/>	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle ≥ 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle ≥ 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle < 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle < 98%)
<input type="checkbox"/>	ANSI C63.10	11.10.7	Method AVGPSD-3
<input type="checkbox"/>	ANSI C63.10	11.10.8	Method AVGPSD-3A

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	1	2412	-16.793	≤8	Pass
	6	2437	-18.722	≤8	Pass
	11	2462	-17.307	≤8	Pass
2	1	2412	-20.036	≤8	Pass
	6	2437	-21.228	≤8	Pass
	11	2462	-18.894	≤8	Pass
3	1	2412	-18.243	≤8	Pass
	6	2437	-21.500	≤8	Pass
	11	2462	-19.589	≤8	Pass

Note: The worst case of PSD as below:

Mode 1 / CH01 / 2412MHz



4.8 Antenna Requirement	VERDICT: PASS
--------------------------------	----------------------

4.8.1 Limit:	
Standard	FCC Part 15 Subpart C Paragraph 15.203
<p>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.</p>	

4.8.2 Antenna Connector Construction:	
<input checked="" type="checkbox"/>	The use of a permanently attached antenna
<input type="checkbox"/>	The antenna use of a unique coupling to the intentional radiator
<input type="checkbox"/>	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 _____