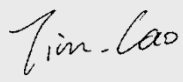
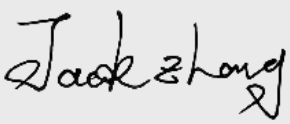
DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

Test report No:
2250118R-RF-US-P06V01

FCC TEST REPORT

Product Name	RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR
Trademark	SGMW
Model and /or type reference	USB-310S-00
FCC ID	2AVYX-USB-310S-00
Applicant´s name / address	SAIC GM WULING AUTOMOBILE COMPANY LIMITED NO.18 Hexi Road，Liuzhou City, Guangxi Zhuang Autonomous Region, 545007 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	2022-06-28
Report Version	V1.0
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)	May. 06, 2022
Date (start test)	May. 09, 2022
Date (finish test)	May. 29, 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
2250118R-RF-US-P06V01	V1.0	Initial issue of report.	2022-06-28

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 1.3Channel 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	2021.07.11	2022.07.10
Two-Line V-Network	R&S	ENV216	15/Jan/77	2022.03.12	2023.03.11
50ohm Termination	SHX	TF2	7081403	2021.09.04	2022.09.03
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/Band Edge/ 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	2021.08.12	2022.08.11
MXA Signal Anlyzer	Keysight	N9020A	MY56060147	2021.07.11	2022.07.10
4TX MIMO Power Sensor	Keysight	X8750A	MY59400102	2022.03.16	2023.03.15
Coaxial Cable	Woken	SFL402	F02-150410-044	2022.01.18	2023.01.17
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2021.07.09	2022.07.08

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100176	2021.08.15	2022.08.14
Bilog Antenna	Teseq GmbH	CBL6112D	27613	2021.08.23	2022.08.22
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2021.11.23	2022.11.22
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	MY55370495	2021.08.12	2022.08.11
Pre-Amplifier	Quietek	AP-025C	CHM-0511006	2021.11.26	2022.11.25
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2021.12.13	2022.12.12
DRG Horn Antenna	AP-025C	AP-025C	CHM-0511006	2021.11.26	2022.11.25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2021.04.14	2023.04.13
Coaxial Cable	ROSENBERGER	LA1-C011-2000/3000	AC5-40G	2022.03.21	2023.03.20
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2021.07.09	2022.07.08
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 complice with standard required as below.

Test item	Uncertainty
Conducted Emission	± 2.02 dB
Emissions in restricted frequency bands	above 1G : ± 3.9 dB below 1G is :± 3.8 dB
20dB Bandwidth	± 1 kHz
Carrier Frequency Separation	± 1 kHz
Number of Hopping Frequencies	± 1 kHz
Time of Occupancy (Dwell Time)	± 0.1 us
Peak OutputPower	± 1.0 dB
Emissions in non-restricted frequency bands	± 1.0 dB
Radiated Emission Band Edge	above 1G : ± 3.9 dB below 1G : ± 3.8 dB

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name	RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR
Model No.	USB-310S-00
FCC ID	2AVYX-USB-310S-00
Manufacturter	LIUZHOU HANGSHENG TECHNOLOGY CO.,LTD
Manufacturer Address	Bailu Industrial Base ,No1,Machang Road ,Liubei District ,Liuzhou ,Guangxi ,545002 China
Factory	LIUZHOU HANGSHENG TECHNOLOGY CO.,LTD
Address	Bailu Industrial Base ,No1,Machang Road ,Liubei District ,Liuzhou, Guangxi ,545002 China

Wireless specification..... :	Bluetooth					
Bluetooth Specification..... :	V5.0					
Operating frequency range(s) ..... :	2400~2483.5MHz					
Type of Modulation..... :	GFSK					
PHYs ..... :	☒	GFSK	☒	Pi/4 DQPSK	☒	8DPSK
Data Rate ..... :	☒	1Mbit/s	☒	2Mbit/s	☒	3Mbit/s
Number of channel..... :	79					

Note：The EUT Bluetooth version is 5.0, which only supports BDR/EDR and does not support BLE.

Rated power supply ..... :	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☐	AC: 100 – 240 V, 50/60 Hz
	☐	19 Vdc and POE 44-57V for ESY10I4, ESY15I4, ESY22I4
	☒	DC: 12 V
Mounting position ..... :	☐	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☐	Hand-held equipment
	☒	Other: Equipment for vehicular use

1.2 Antenna Information

Antenna model / type number ..... :	N/A			
Antenna serial number ..... :	N/A			
Antenna Delivery ..... :	☒	1TX + 1RX		
	☐	2TX + 2RX		
	☐	Others:……		
Antenna technology ..... :	☒	SISO		
	☐	MIMO	☐	CDD
			☐	Beam-forming
Antenna Type ..... :	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	PIFA
			☒	PCB
			☐	Dipole
			☐	Others……..
Antenna Gain ..... :	0 dBi			

1.3 Channel List

Bluetooth Working Frequency of Each Channel: (For V3.0)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz	03	2405 MHz
04	2406 MHz	05	2407 MHz	06	2408 MHz	07	2409 MHz
08	2410 MHz	09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz	15	2417 MHz
16	2418 MHz	17	2419 MHz	18	2420 MHz	19	2421 MHz
20	2422 MHz	21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz	27	2429 MHz
28	2430 MHz	29	2431 MHz	30	2432 MHz	31	2433 MHz
32	2434 MHz	33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz	39	2441 MHz
40	2442 MHz	41	2443 MHz	42	2444 MHz	43	2445 MHz
44	2446 MHz	45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz	51	2453 MHz
52	2454 MHz	53	2455 MHz	54	2456 MHz	55	2457 MHz
56	2458 MHz	57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz	63	2465 MHz
64	2466 MHz	65	2467 MHz	66	2468 MHz	67	2469 MHz
68	2470 MHz	69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz	75	2477 MHz
76	2478 MHz	77	2479 MHz	78	2480 MHz	N/A	N/A

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.

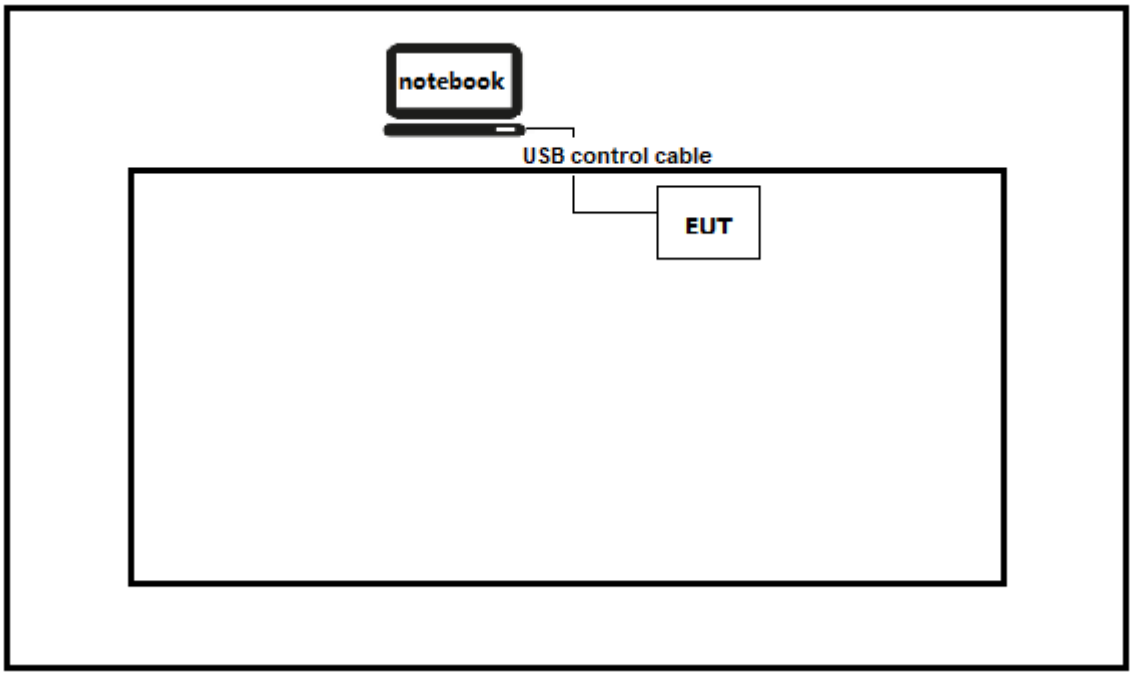
Test Mode For Bluetooth	Mode 1: Transmitter-1Mbps(GFSK_DH5)
	Mode 2: Transmitter-2Mbps(Pi/4 DQPSK_DH5)
	Mode 3: Transmitter-3Mbps(8DPSK_DH5)
	Mode 4: Transmitter-Hopping-1Mbps(GFSK_DH5)
	Mode 5: Transmitter-Hopping-2Mbps(Pi/4 DQPSK_DH5)
	Mode 6: Transmitter-Hopping-3Mbps(8DPSK_DH5)

2.2 Auxiliary equipment / Test software for the EUT

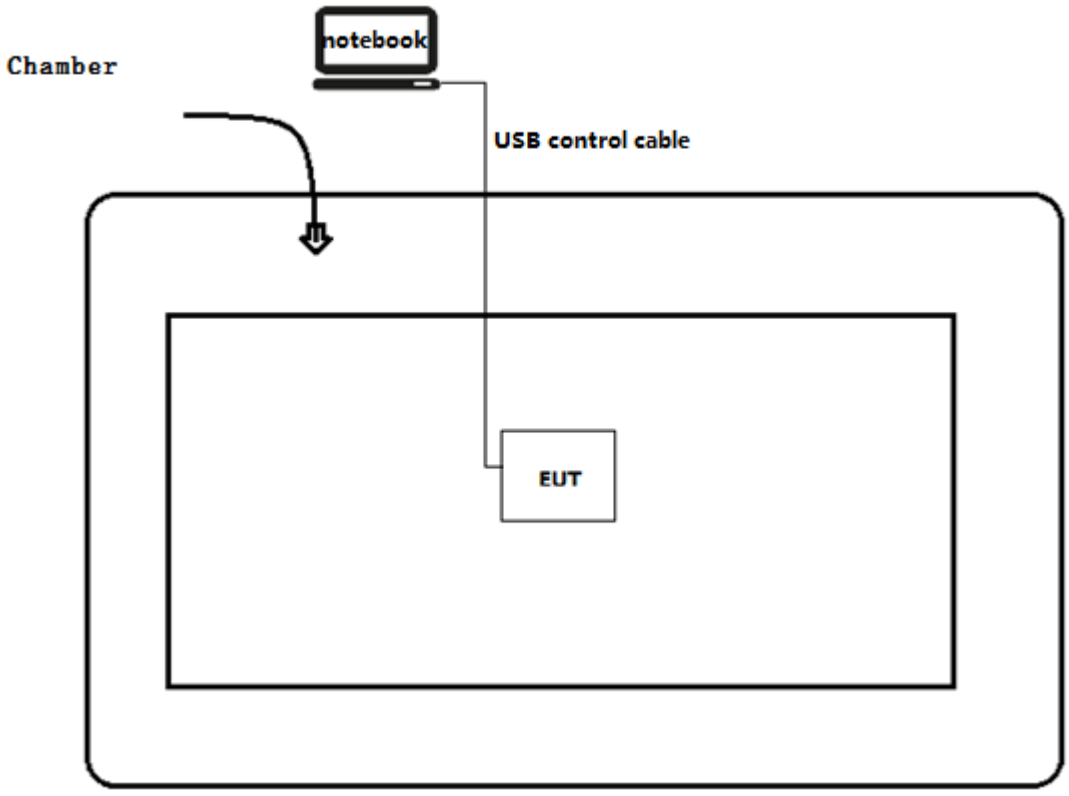
Auxiliary equipment	Type / Version	Manufacturer	Supplied by
Notebook	2526	Think Pad	N/A
Software	Type / Version	Manufacturer	Supplied by
BT_Tool	N/A	N/A	N/A

2.3 Test Configuration / Block diagram used for tests

Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Radiated Emission



2.4 Testing process

1	Setup the EUT as shown in Section 2.3
2	Run the software “BT_Tool” 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	2021	Operation within the bands902–928 MHz, 2400–2483.5 MHz, and5725–5850 MHz.
ANSI C63.10	2013	American National Standard ofProcedures for Compliance Testing ofUnlicensed Wireless Devices
KDB558074 D01 v05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247

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

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2015Section 15.207	N/A	N/A
Emissions in restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015Section 15.209	Yes	No
20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)	Yes	No
Carrier Frequency Separation	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)	Yes	No
Number of Hopping Frequencies	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)	Yes	No
Time of Occupancy (Dwell Time)	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(a)(1)(iii)	Yes	No
Peak OutputPower	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.247(b)(1)	Yes	No
Emissions in non-restricted frequency bands	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.215(c), 15.247(d)	Yes	No
Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015 15.247(d)	Yes	No
Antenna Requirement	FCC CFR Title 47 Part 15 Subpart C: 2015 Section 15.203	Yes	No

3.4 Test Facility

USA	**:**	**FCC Designation Number: CN1199**

4 TEST RESULTS

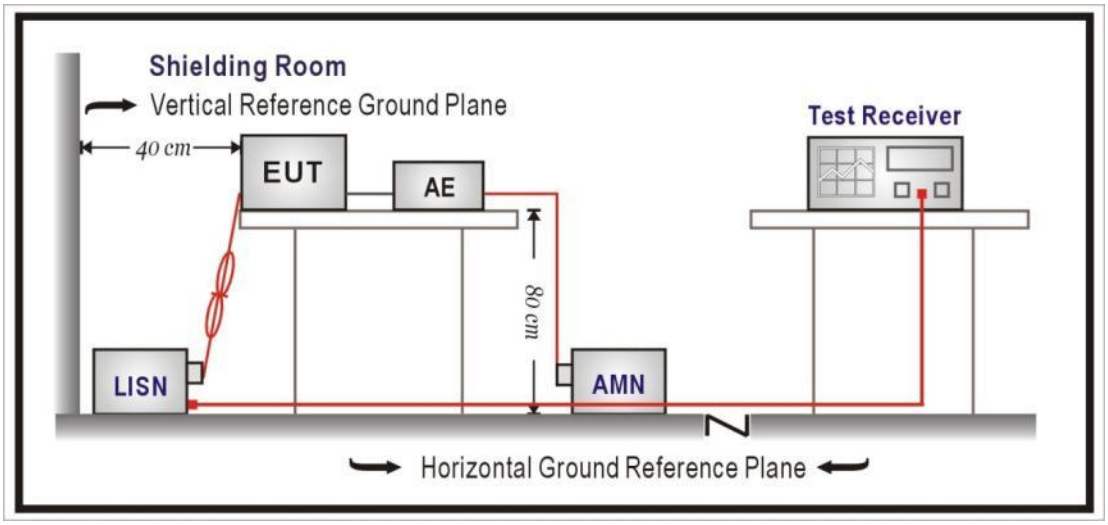
4.1 Conducted Emission	VERDICT: N/A

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

[1)] At the transition frequency, the lower limit applies.
[2)] The limit decreases linearly with the logarithm of the frequency.
NOTE 1: The exclusion band for transmitters shall be considered for transmitters operating at frequencies below 30 MHz.
NOTE 2: Where the AC output port is directly connected (or via a circuit breaker) to the AC power input port of the EUT the AC power output port need not to be tested.

4.1.2 Test Setup



4.1.3 Test Procedure

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

4.1.4 Test Data

Note: EUT is DC powered .

4.2 Emissions in restricted frequency bands — VERDICT: PASS

4.2.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.209

Restricted Bands of operation for FCC

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
0.495 – 0.505	16.69475 –16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2690 – 2900	22.01 – 23.12
8.81425 – 8.81475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.72 – 173.2	3332 – 3339	31.2 – 31.8
12.51975–12.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675–12.57725	322 – 335.4	3600 – 4400	
13.36 – 13.41			

Restricted Band Emissions Limit

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

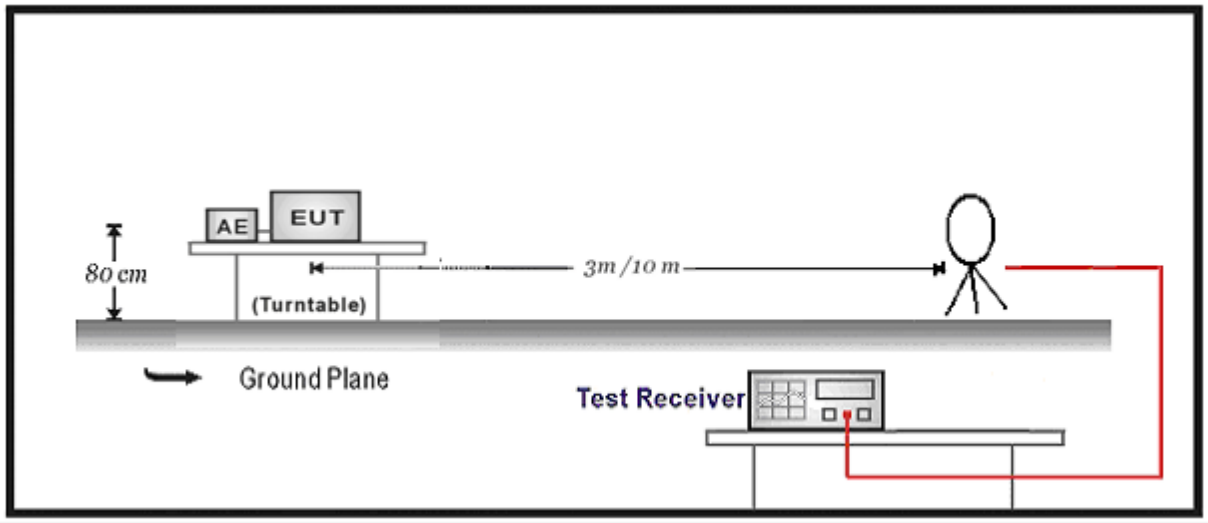
Note 1: At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed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

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

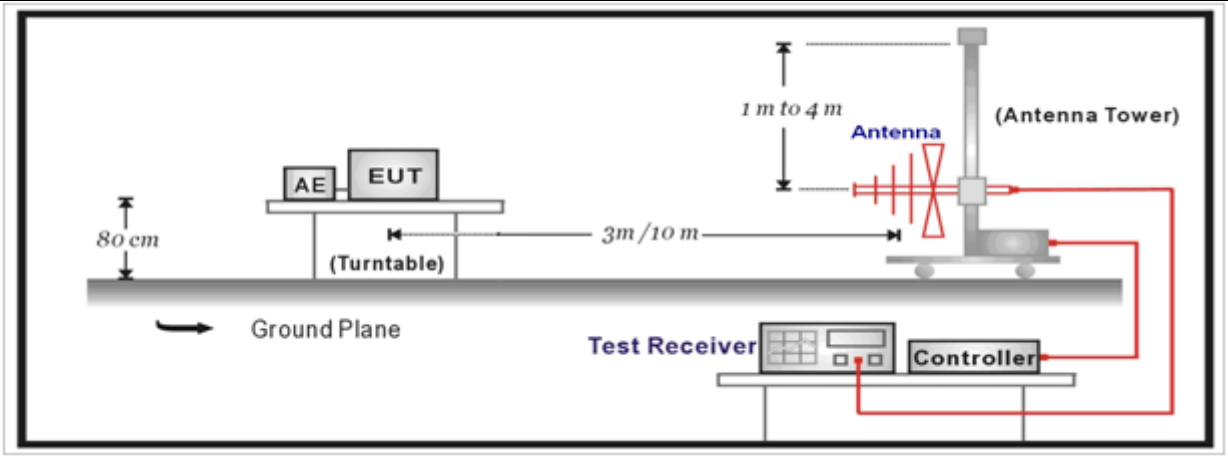
dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

4.2.2 Test Setup

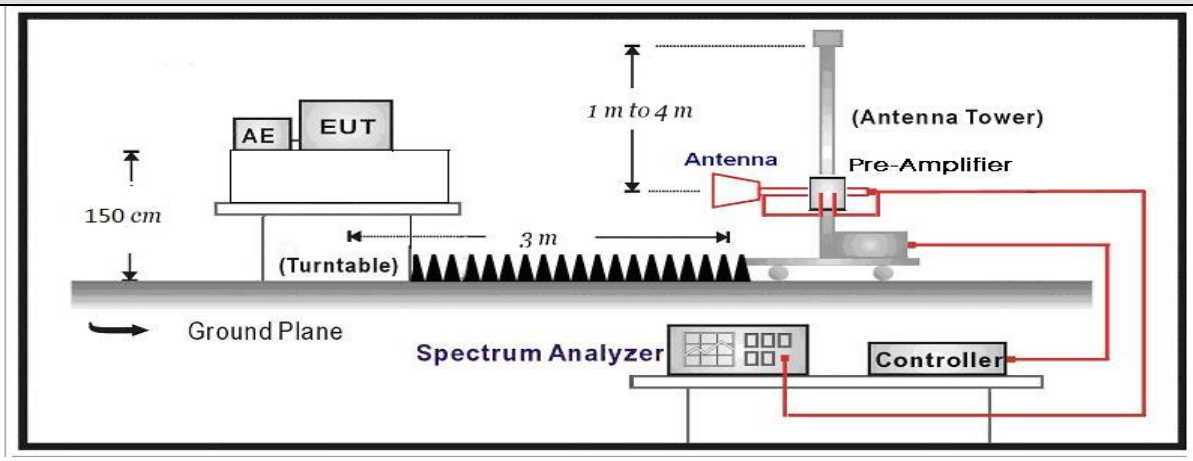
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



Above 1GHz Test Setup:

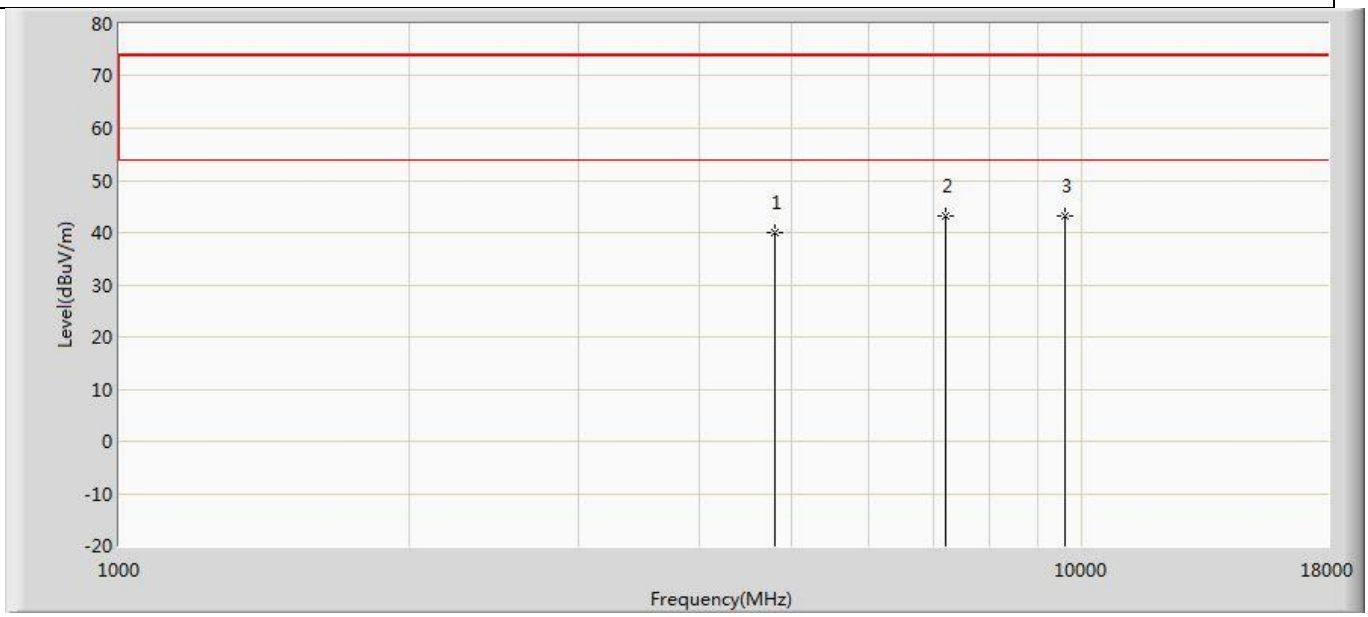


4.2.3 Test Procedure

	References Rule			Chapter	Description
☒	ANSI C63.10			11.12	Emissions in restricted frequency bands
	☒	ANSI C63.10		11.12.1	Radiated emission measurements
	☒	ANSI C63.10		11.12.2.7	Radiated spurious emission test
		☒	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
		☒	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
		☒	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

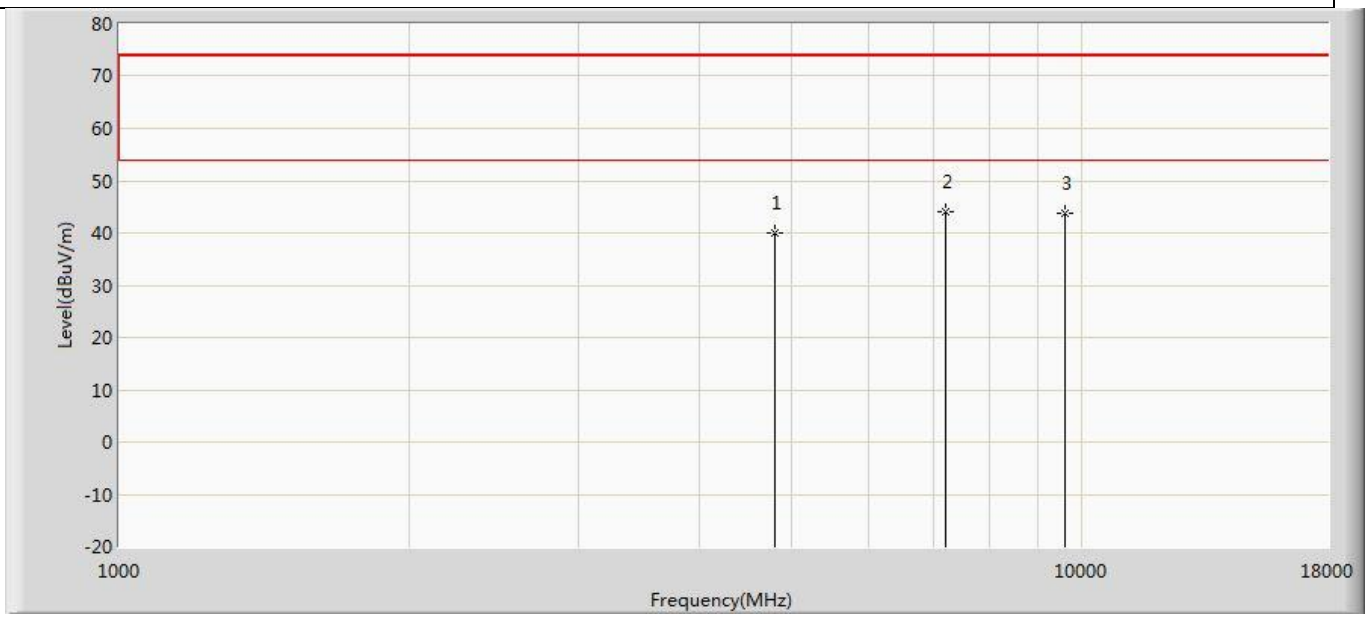
4.2.4 Test Data

Profile: 2250118R	Page No.: 19
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



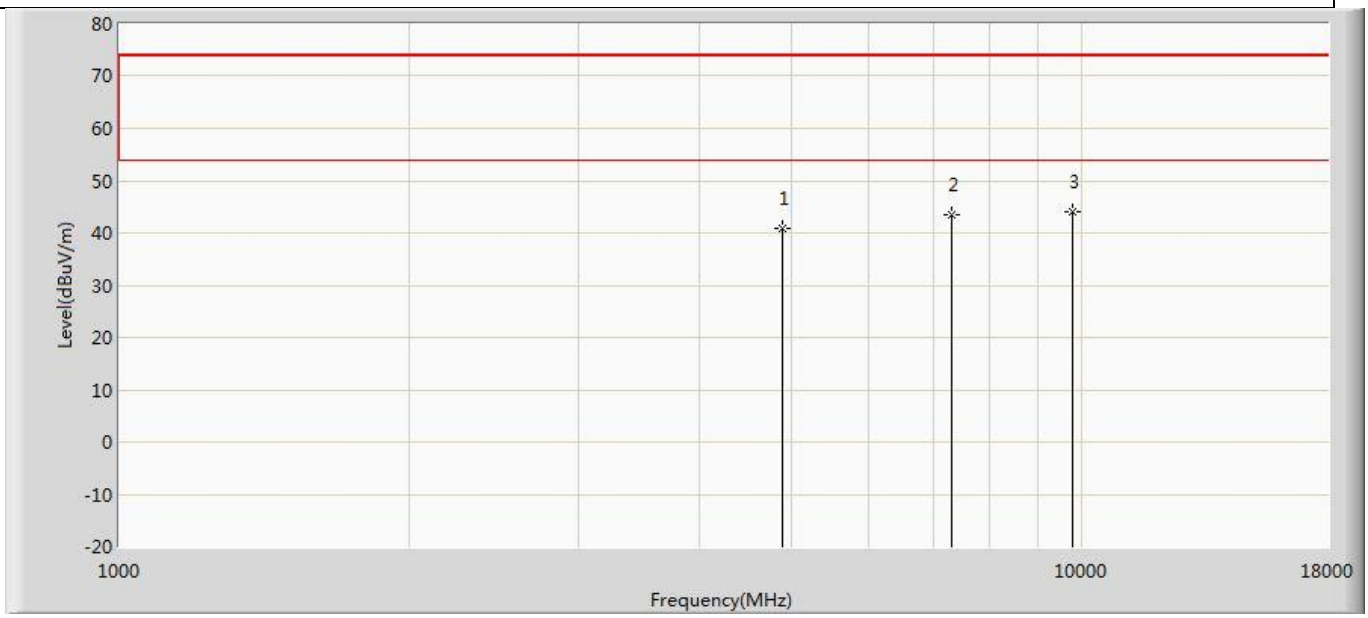
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.995	47.802	-34.005	74.000	-7.807	PK
2		7206.000	43.275	47.179	-30.725	74.000	-3.903	PK
3	*	9608.000	43.291	45.196	-30.709	74.000	-1.904	PK

Profile: 2250118R	Page No.: 20
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



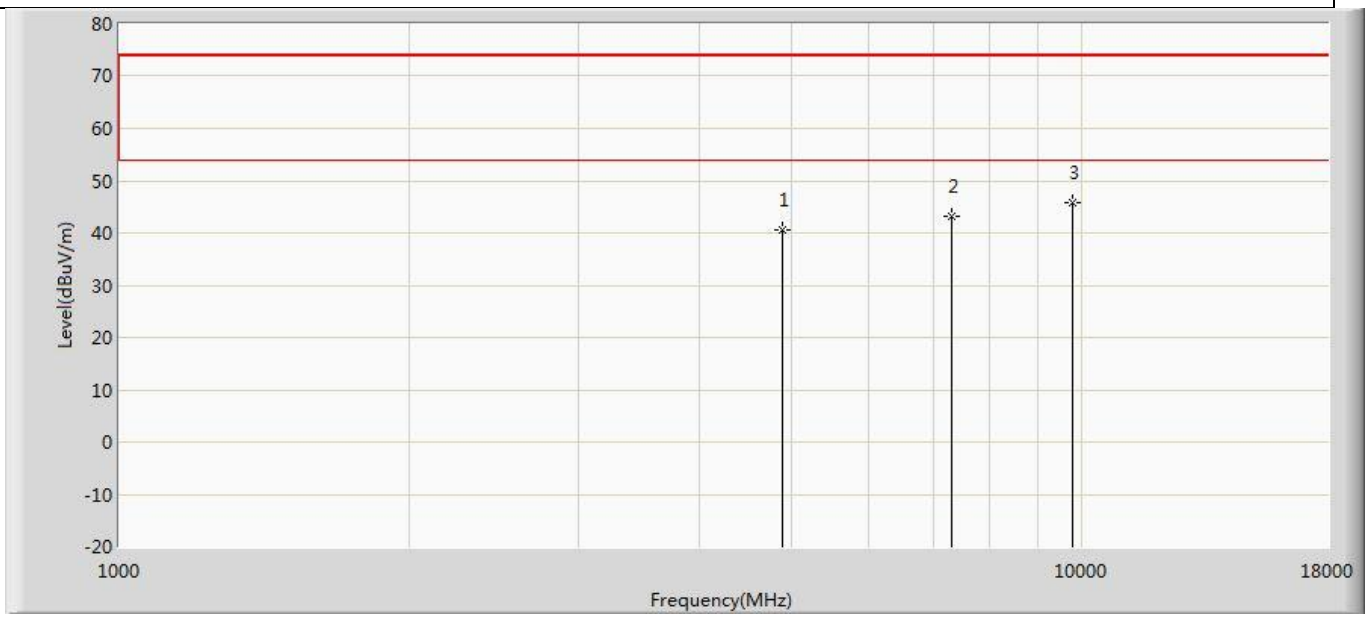
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	39.906	47.713	-34.094	74.000	-7.807	PK
2	*	7206.000	44.025	47.929	-29.975	74.000	-3.903	PK
3		9608.000	43.895	45.800	-30.105	74.000	-1.904	PK

Profile: 2250118R	Page No.: 21
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2441MHz by DH5	



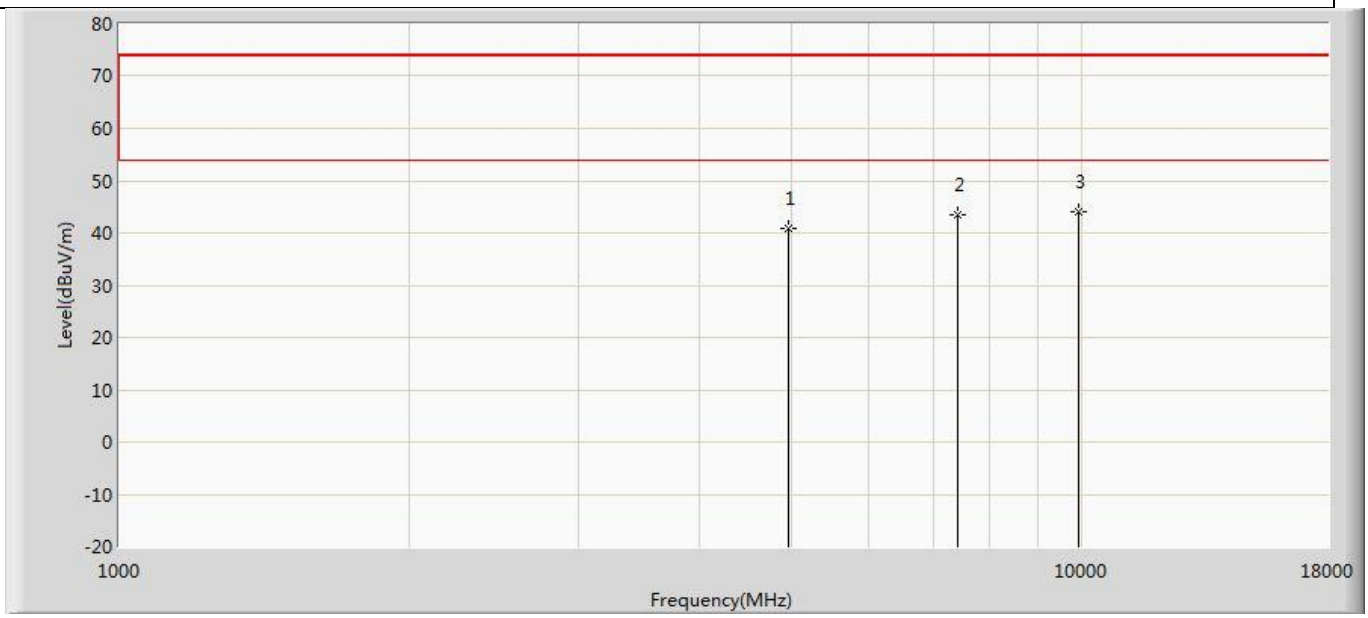
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	40.932	48.689	-33.068	74.000	-7.757	PK
2		7323.000	43.480	47.370	-30.520	74.000	-3.891	PK
3	*	9764.000	44.169	45.404	-29.831	74.000	-1.235	PK

Profile: 2250118R	Page No.: 22
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2441MHz by DH5	



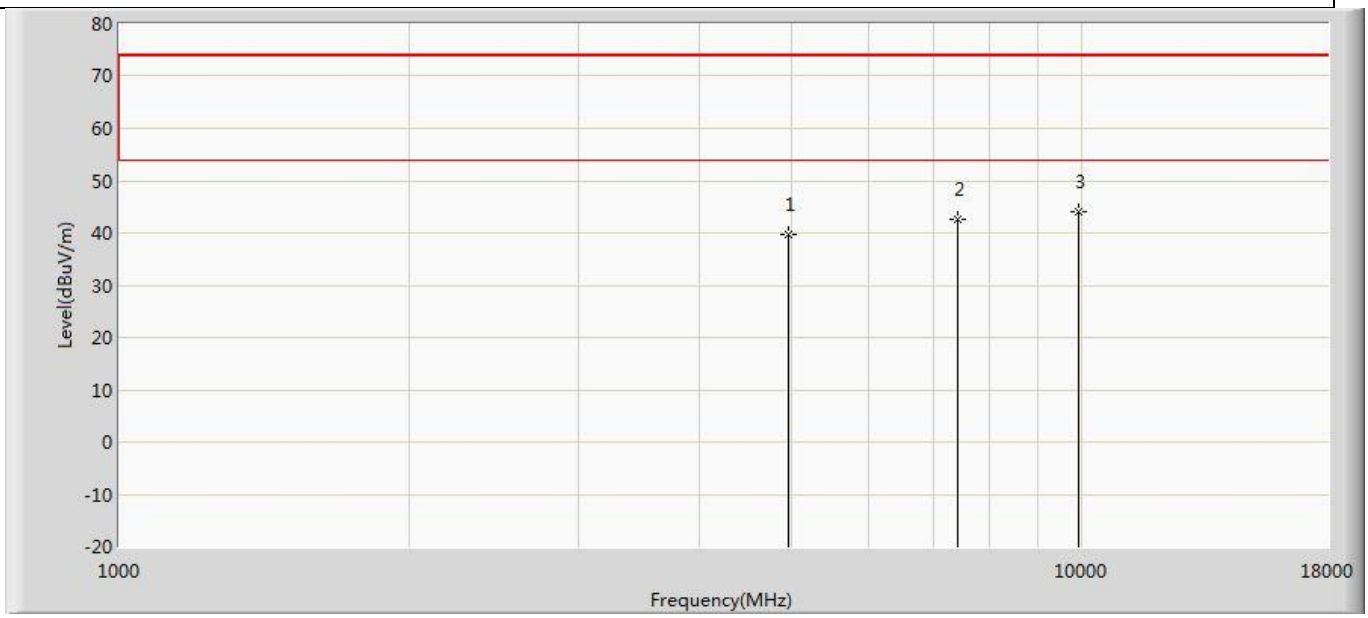
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	40.593	48.350	-33.407	74.000	-7.757	PK
2		7323.000	43.115	47.005	-30.885	74.000	-3.891	PK
3	*	9764.000	45.816	47.051	-28.184	74.000	-1.235	PK

Profile: 2250118R	Page No.: 23
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



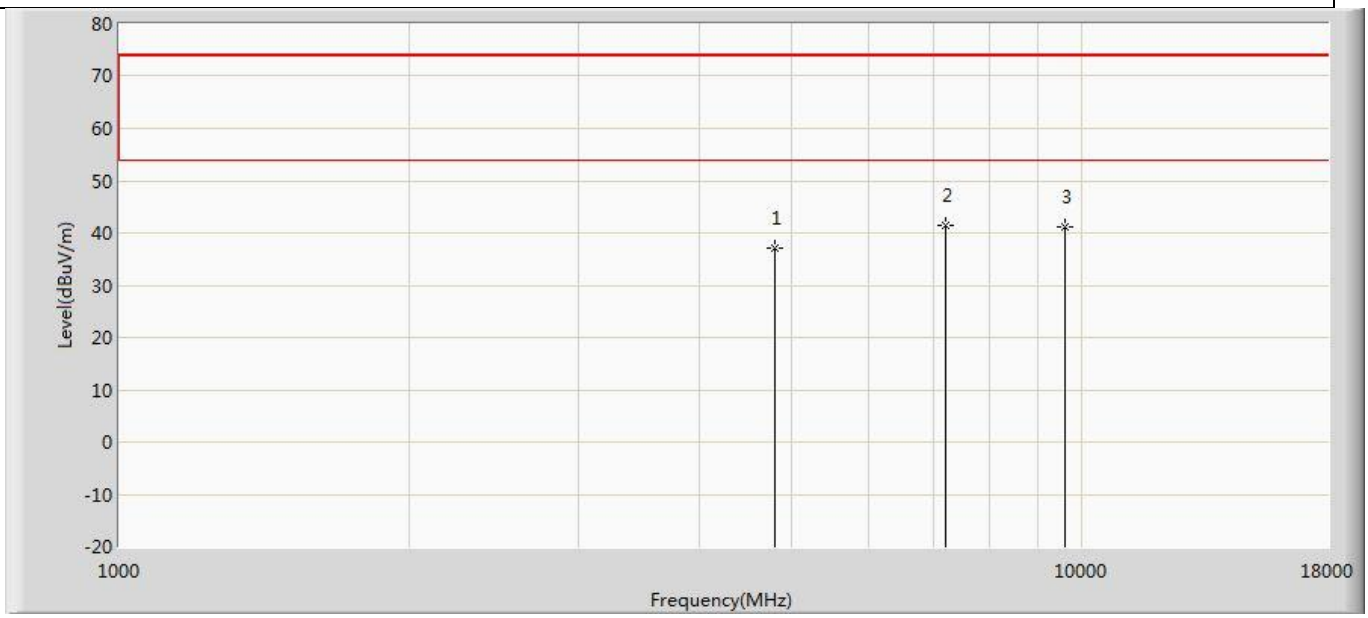
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	41.005	49.158	-32.995	74.000	-8.153	PK
2		7440.000	43.493	47.402	-30.507	74.000	-3.909	PK
3	*	9920.000	44.150	45.721	-29.850	74.000	-1.571	PK

Profile: 2250118R	Page No.: 24
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



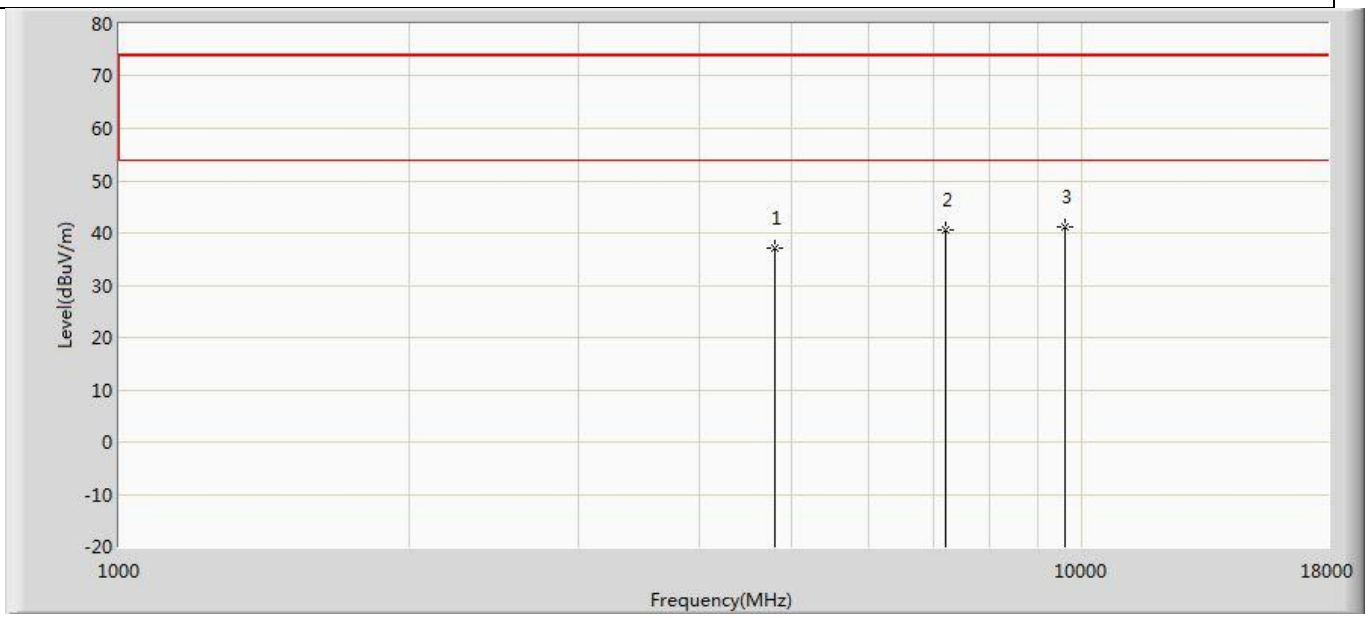
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	39.787	47.940	-34.213	74.000	-8.153	PK
2		7440.000	42.719	46.628	-31.281	74.000	-3.909	PK
3	*	9920.000	44.069	45.640	-29.931	74.000	-1.571	PK

Profile: 2250118R	Page No.: 25
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by 2DH5	



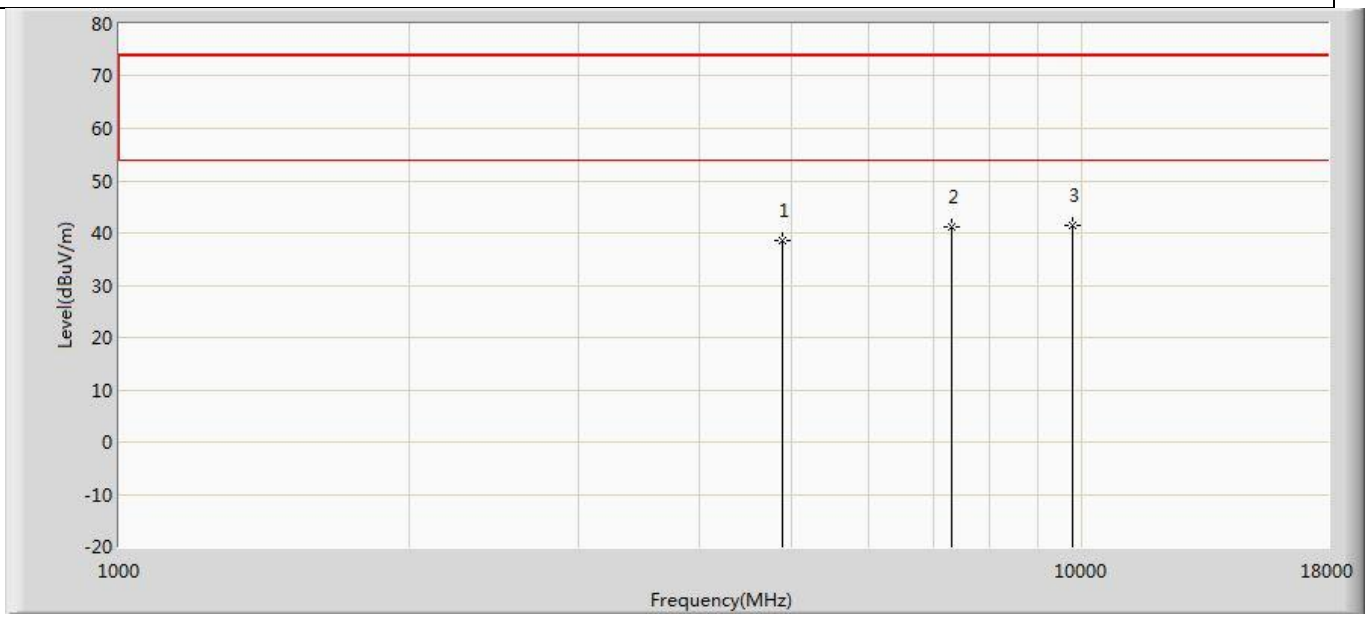
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.206	45.013	-36.794	74.000	-7.807	PK
2	*	7206.000	41.505	45.409	-32.495	74.000	-3.903	PK
3		9608.000	41.142	43.047	-32.858	74.000	-1.904	PK

Profile: 2250118R	Page No.: 26
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by 2DH5	



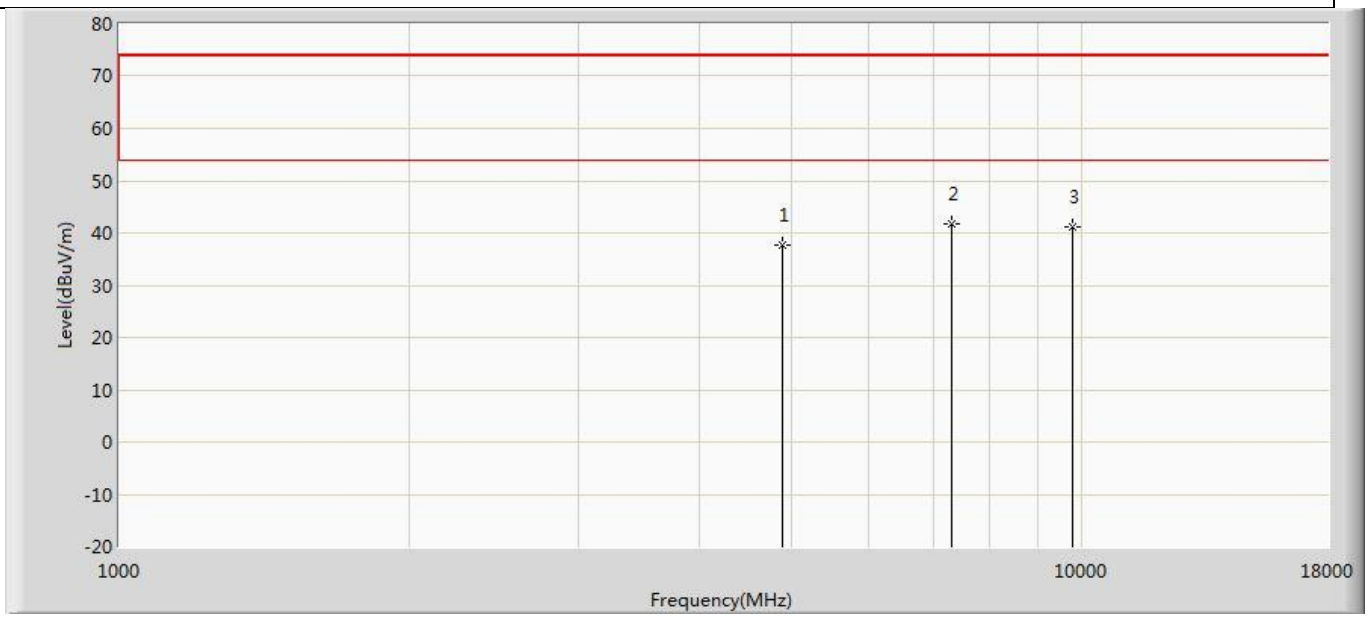
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.218	45.025	-36.782	74.000	-7.807	PK
2		7206.000	40.512	44.416	-33.488	74.000	-3.903	PK
3	*	9608.000	41.290	43.195	-32.710	74.000	-1.904	PK

Profile: 2250118R	Page No.: 27
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2441MHz by 2DH5	



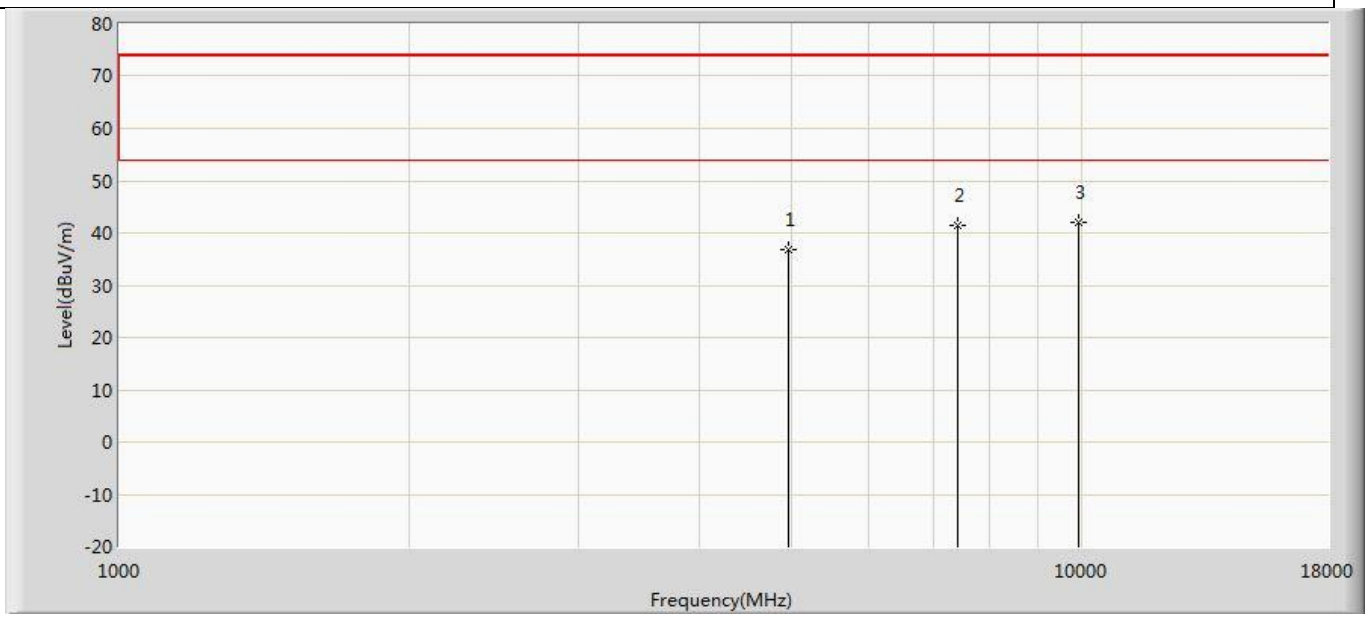
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	38.606	46.363	-35.394	74.000	-7.757	PK
2		7323.000	41.153	45.043	-32.847	74.000	-3.891	PK
3	*	9764.000	41.315	42.550	-32.685	74.000	-1.235	PK

Profile: 2250118R	Page No.: 28
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2441MHz by 2DH5	



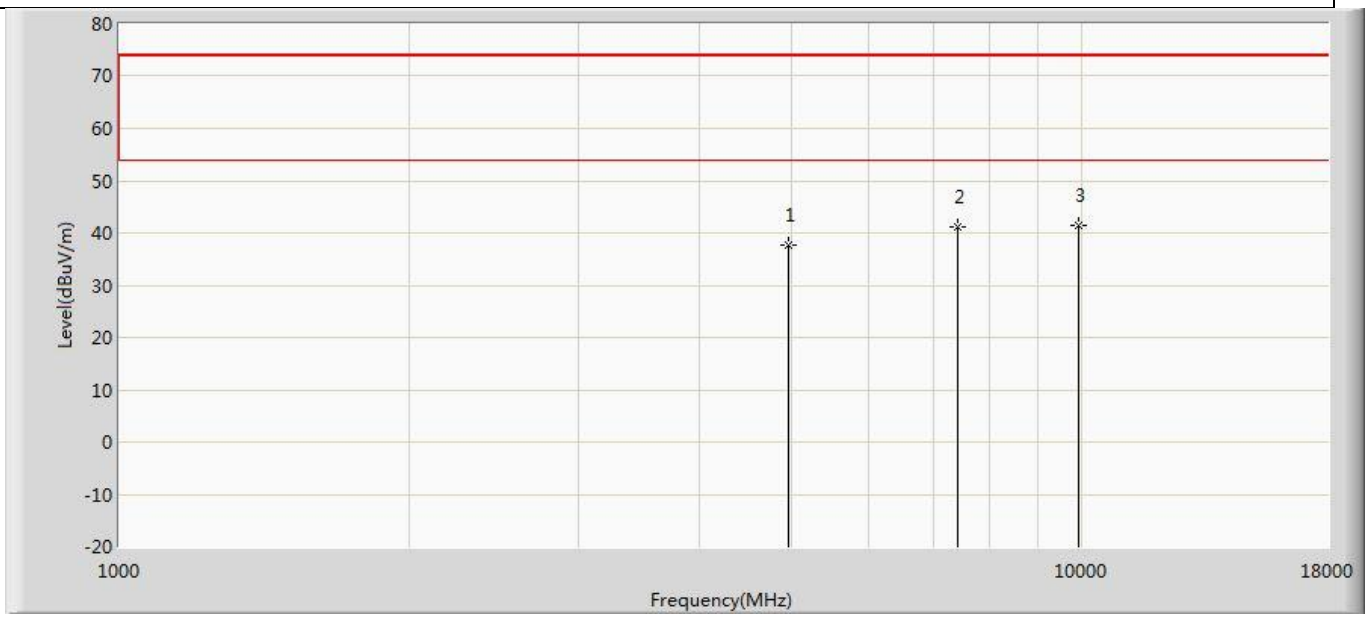
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	37.709	45.466	-36.291	74.000	-7.757	PK
2	*	7323.000	41.701	45.591	-32.299	74.000	-3.891	PK
3		9764.000	41.270	42.505	-32.730	74.000	-1.235	PK

Profile: 2250118R	Page No.: 29
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by 2DH5	



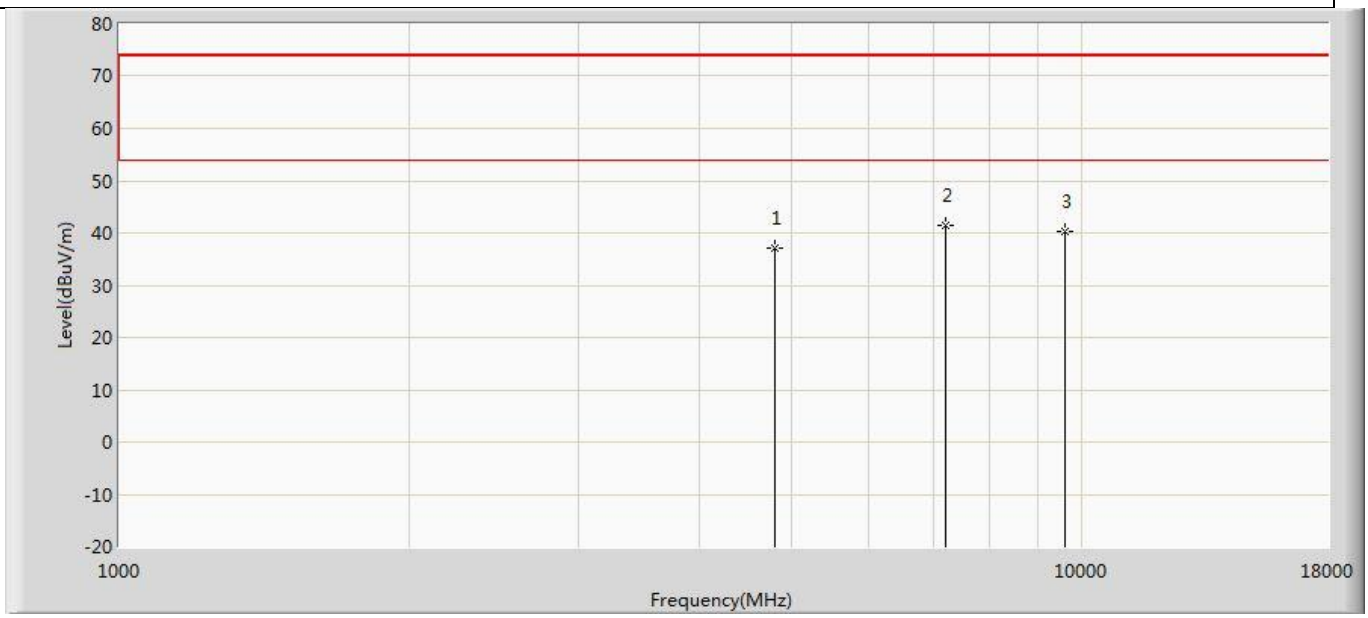
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	36.778	44.931	-37.222	74.000	-8.153	PK
2		7440.000	41.376	45.285	-32.624	74.000	-3.909	PK
3	*	9920.000	41.985	43.556	-32.015	74.000	-1.571	PK

Profile: 2250118R	Page No.: 30
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by 2DH5	



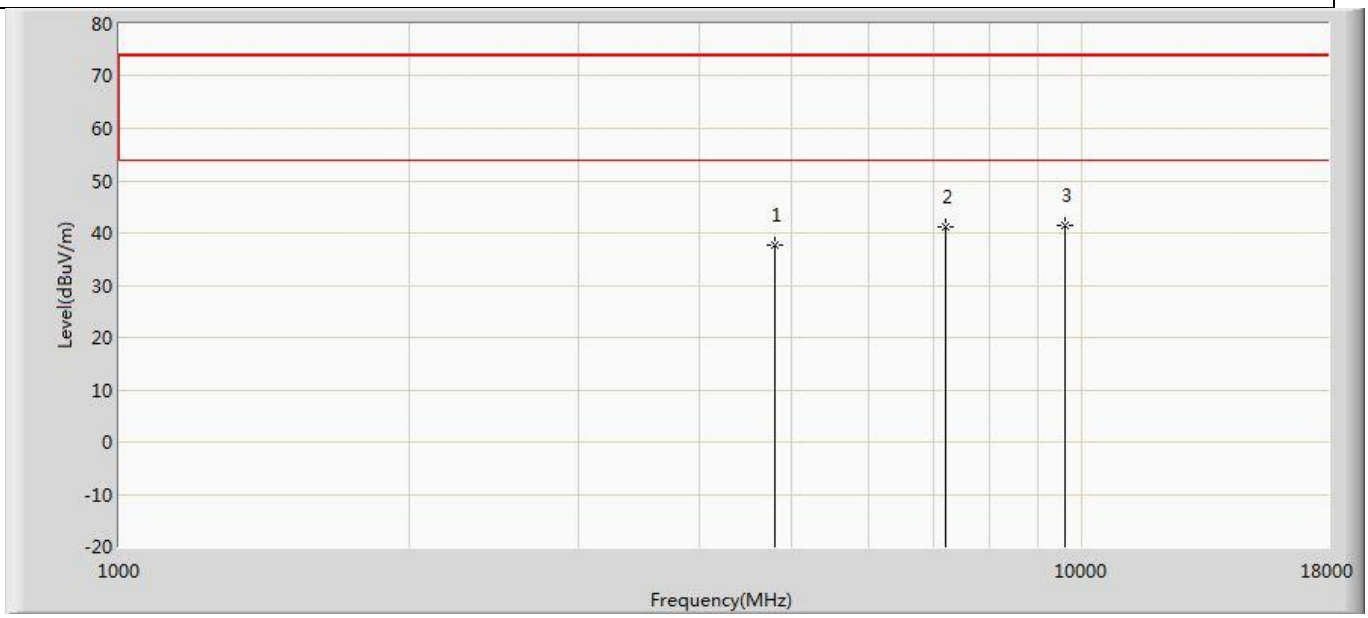
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.719	45.872	-36.281	74.000	-8.153	PK
2		7440.000	41.017	44.926	-32.983	74.000	-3.909	PK
3	*	9920.000	41.527	43.098	-32.473	74.000	-1.571	PK

Profile: 2250118R	Page No.: 31
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



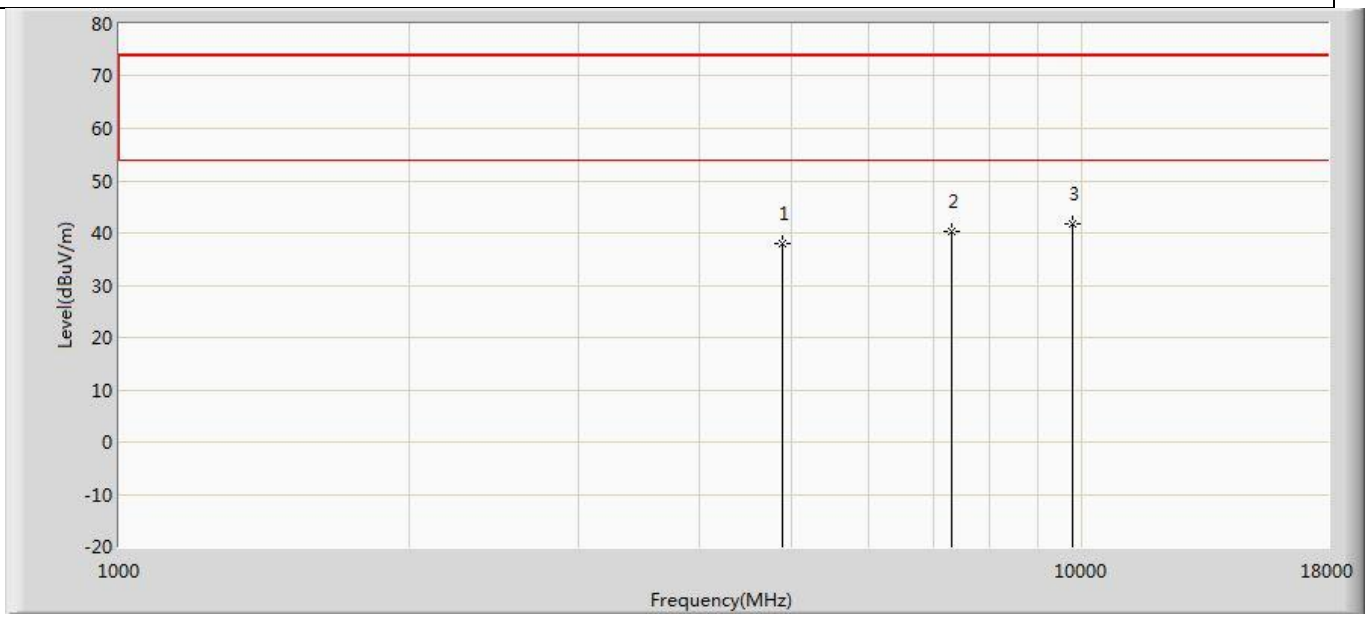
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.012	44.819	-36.988	74.000	-7.807	PK
2	*	7206.000	41.559	45.463	-32.441	74.000	-3.903	PK
3		9608.000	40.284	42.189	-33.716	74.000	-1.904	PK

Profile: 2250118R	Page No.: 32
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



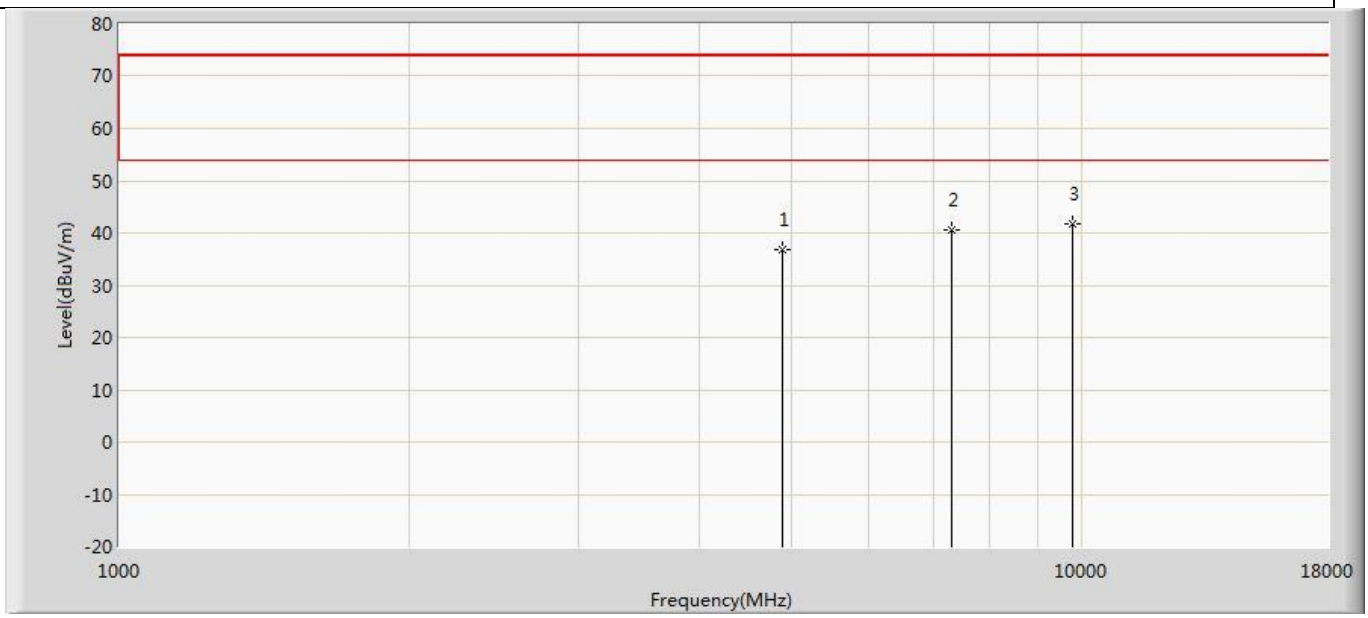
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4804.000	37.642	45.449	-36.358	74.000	-7.807	PK
2		7206.000	41.060	44.964	-32.940	74.000	-3.903	PK
3	*	9608.000	41.531	43.436	-32.469	74.000	-1.904	PK

Profile: 2250118R	Page No.: 33
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2441MHz by 3DH5	



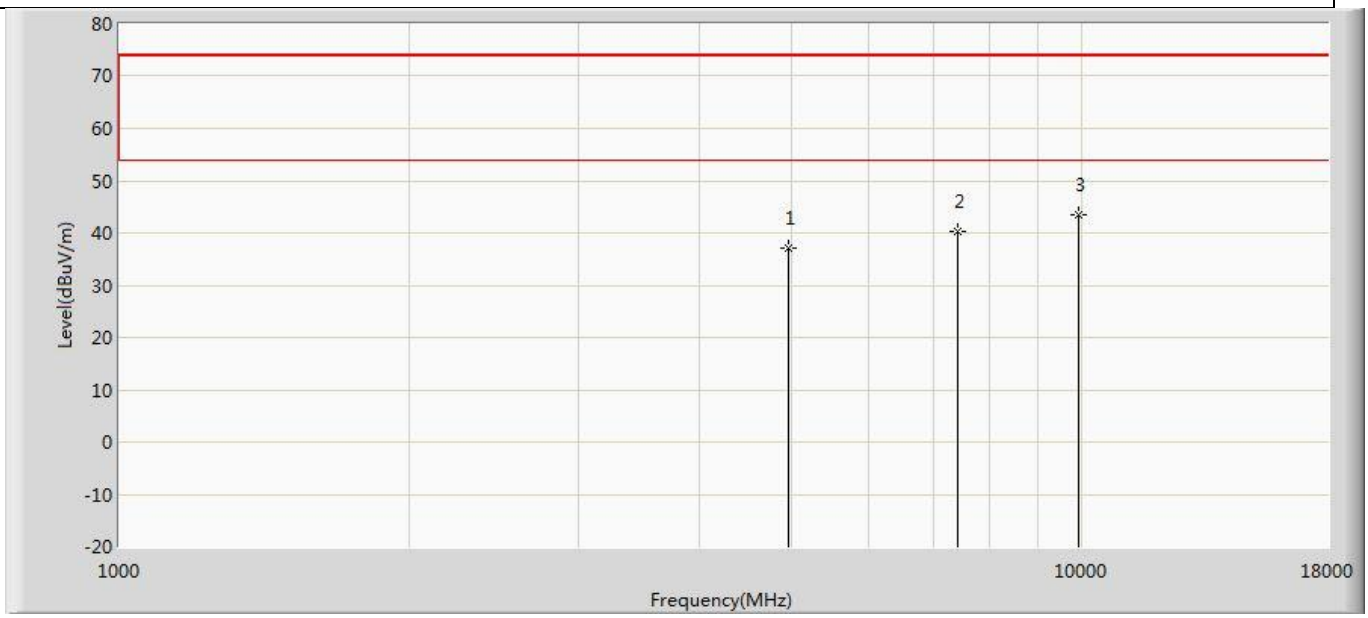
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	37.871	45.628	-36.129	74.000	-7.757	PK
2		7323.000	40.399	44.289	-33.601	74.000	-3.891	PK
3	*	9764.000	41.624	42.859	-32.376	74.000	-1.235	PK

Profile: 2250118R	Page No.: 34
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2441MHz by 3DH5	



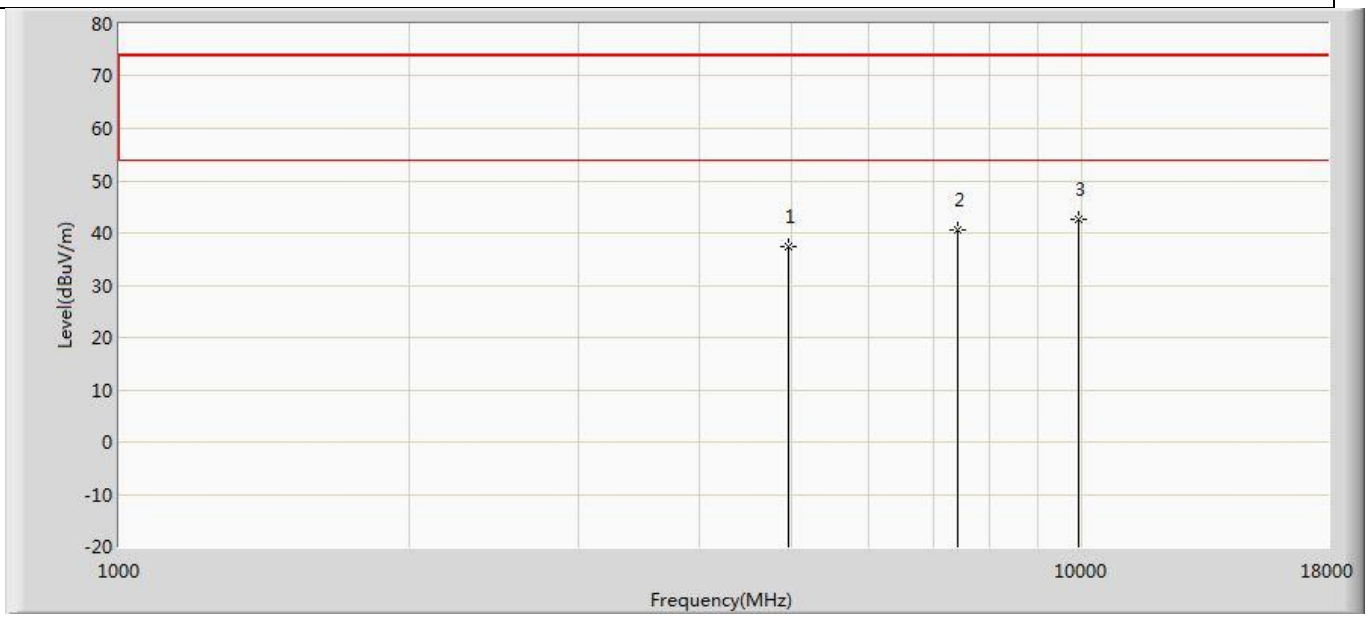
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4882.000	36.724	44.481	-37.276	74.000	-7.757	PK
2		7323.000	40.680	44.570	-33.320	74.000	-3.891	PK
3	*	9764.000	41.733	42.968	-32.267	74.000	-1.235	PK

Profile: 2250118R	Page No.: 35
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.080	45.233	-36.920	74.000	-8.153	PK
2		7440.000	40.225	44.134	-33.775	74.000	-3.909	PK
3	*	9920.000	43.429	45.000	-30.571	74.000	-1.571	PK

Profile: 2250118R	Page No.: 36
Engineer: Pengchengyang	
Site: AC5	Time: 2022/05/17 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	

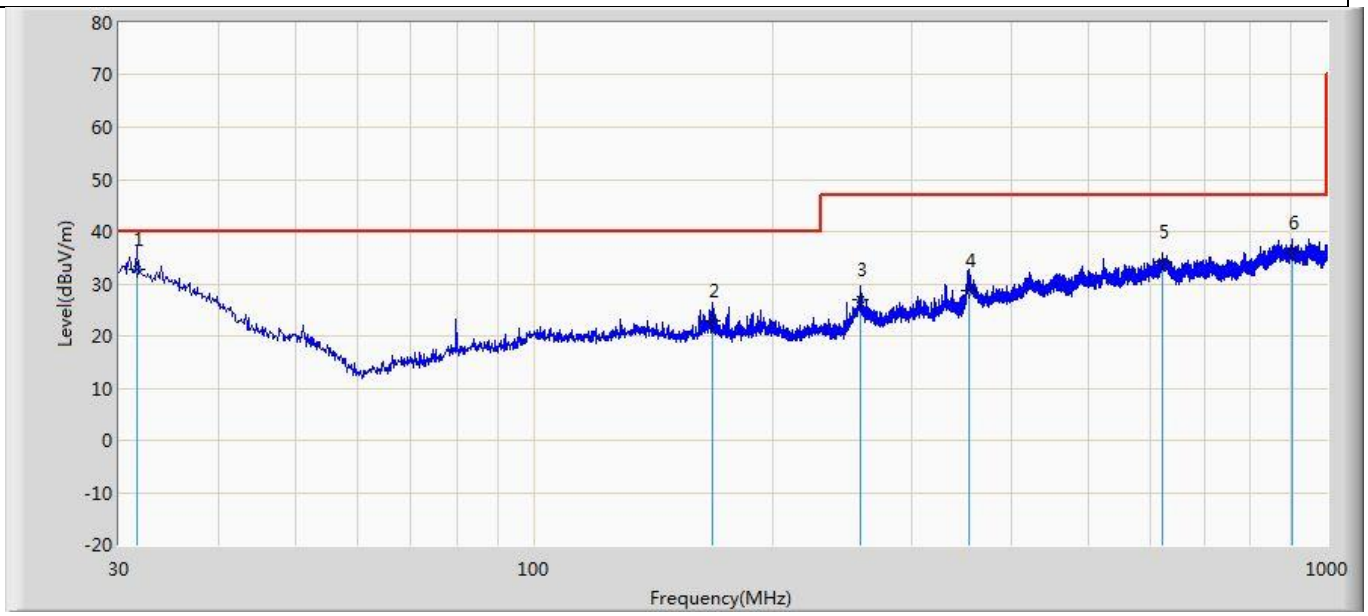


No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4960.000	37.409	45.562	-36.591	74.000	-8.153	PK
2		7440.000	40.497	44.406	-33.503	74.000	-3.909	PK
3	*	9920.000	42.483	44.054	-31.517	74.000	-1.571	PK

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:

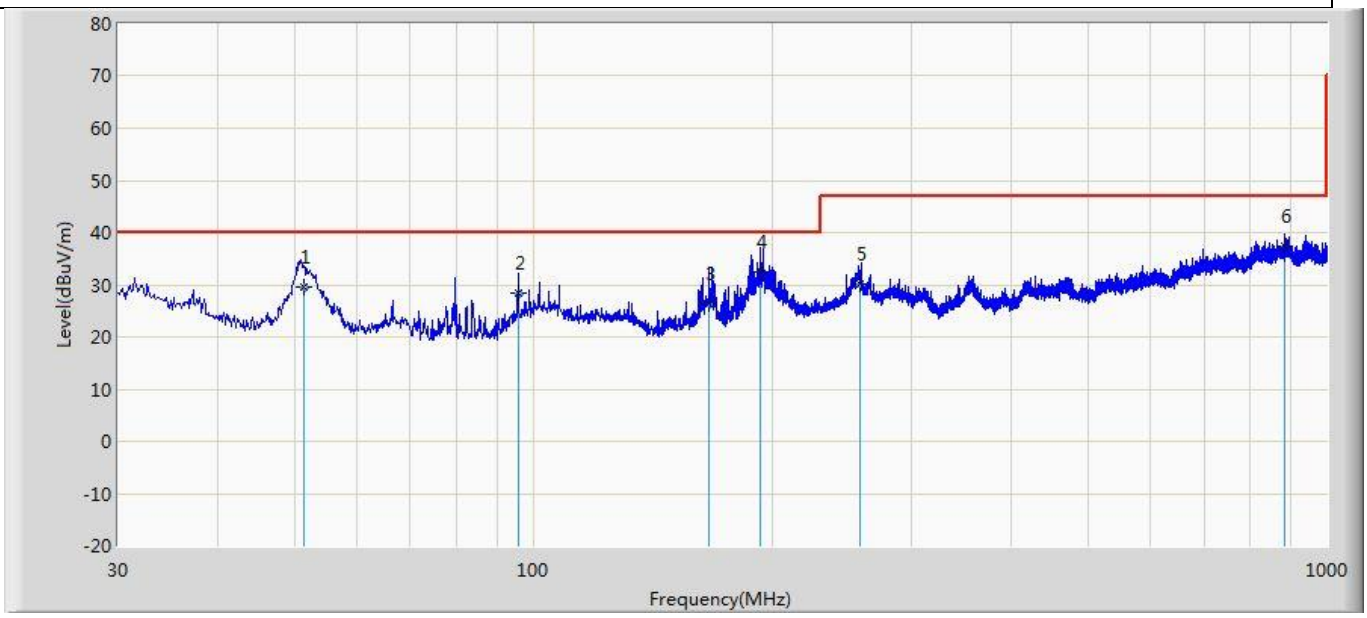
Profile:2250118R	Page No.: 15
Engineer: Pengchengyang	
Site: AC2	Time: 2022/05/27 - 20:20
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1	*	31.654	32.690	5.546	-7.310	40.000	20.796	6.349	0.000	150	54	QP
2		167.654	22.858	5.540	-17.142	40.000	10.221	7.097	0.000	105	300	QP
3		258.654	27.033	8.156	-19.967	47.000	11.430	7.447	0.000	254	105	QP
4		353.546	28.682	5.156	-18.318	47.000	15.762	7.763	0.000	310	3	QP
5		619.654	34.310	3.561	-12.690	47.000	22.250	8.499	0.000	300	320	QP
6		902.546	35.820	2.651	-11.180	47.000	23.996	9.174	0.000	321	320	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)

Profile: 2250118R	Page No.: 16
Engineer: Pengchengyang	
Site: AC2	Time: 2022/05/27 - 20:22
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC2_3M(30-1000M)	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode1	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Probe (dB/m)	Cable (dB)	Amp (dB)	Ant Pos (cm)	Table Pos (deg)	Type
1		51.546	29.592	10.654	-10.408	40.000	12.442	6.497	0.000	306	132	QP
2		95.654	28.550	8.456	-11.450	40.000	13.337	6.757	0.000	341	150	QP
3		166.654	26.501	7.156	-13.499	40.000	12.255	7.090	0.000	215	51	QP
4	*	193.654	32.425	10.546	-7.575	40.000	14.679	7.200	0.000	241	122	QP
5		258.546	30.013	6.510	-16.987	47.000	16.057	7.446	0.000	147	300	QP
6		884.654	37.382	3.651	-9.618	47.000	24.585	9.146	0.000	210	321	QP

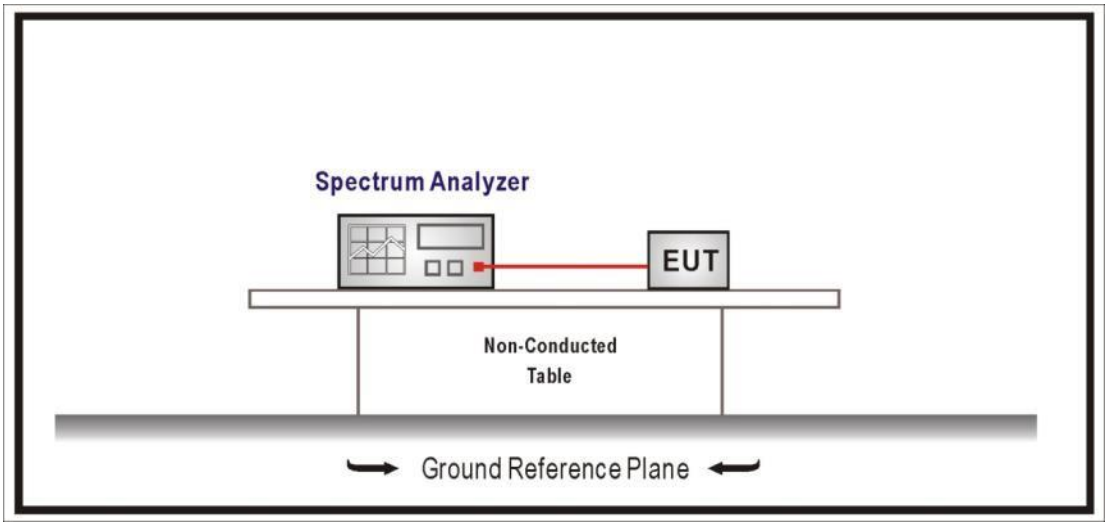
Note:
1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Factor(Probe+Cable-Amp)

4.3 20dB Bandwidth	VERDICT: PASS

4.3.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(a)
☒	For frequency hopping systems operating in 2400-2483.5 MHz band, within frequency range.
☐	For frequency hopping systems operating in 902-928 MHz band, the maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
☐	For frequency hopping systems operating in 5725-5850 MHz band, the maximum 20 dB bandwidth of the hopping channel is 1 MHz.

4.3.2 Test Setup



4.3.3 Test Procedure

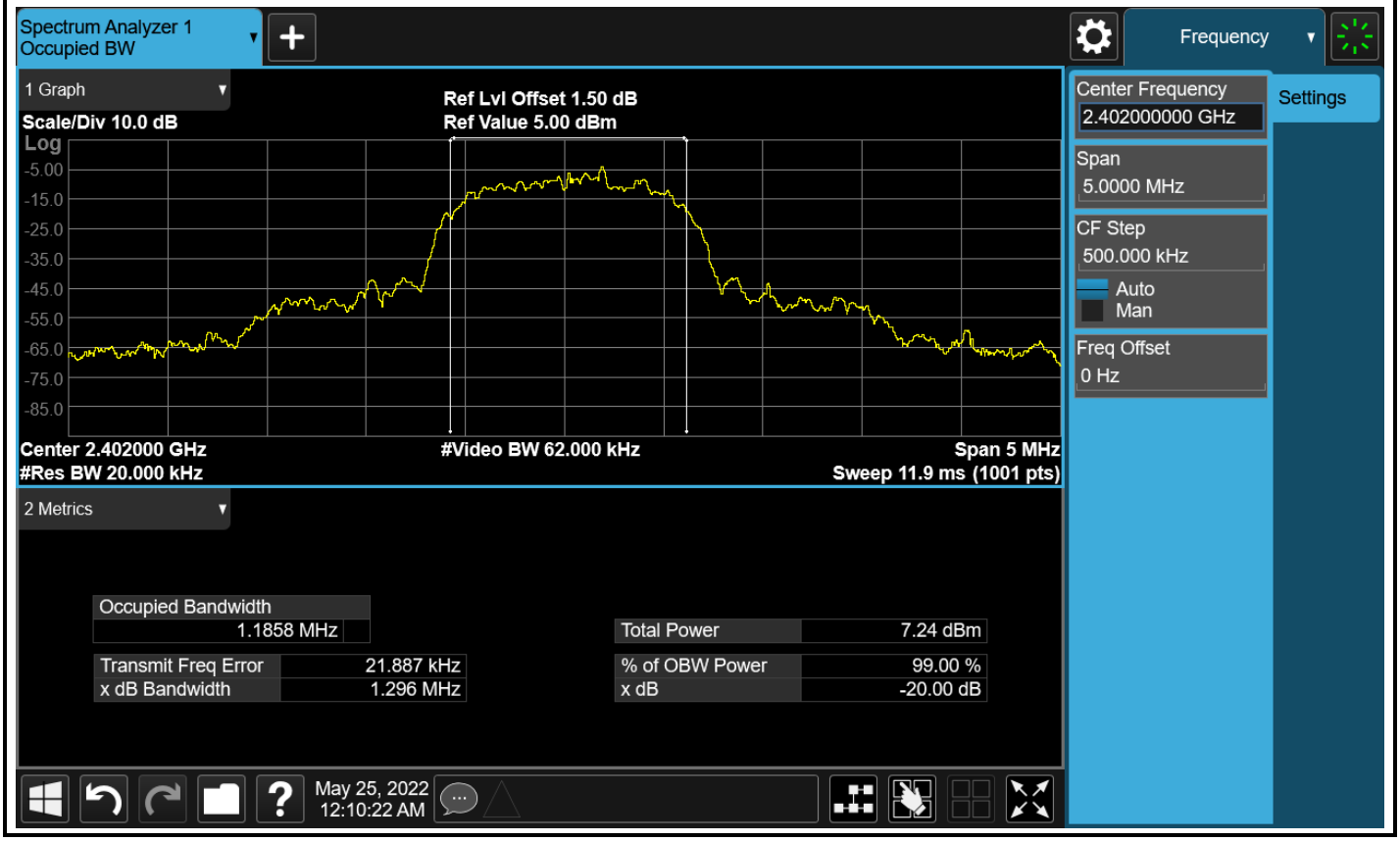
References Rule			Chapter	Description
☒	ANSI C63.10		6.9	Occupied bandwidth tests
	☒	ANSI C63.10	6.9.2	Occupied bandwidth—relative measurement procedure

4.3.4 Test Data

Mode	Channel	Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
1	00	2402	884.8	818.26
	39	2441	884.7	805.88
	79	2480	885.2	807.41
2	00	2402	1327	1172.3
	39	2441	1325	1171.7
	79	2480	1327	1170.9
3	00	2402	1296	1185.8
	39	2441	1299	1178.7
	79	2480	1300	1178.2

Note 1: The worst data plot as below:

Mode3/CH00/2402MHz

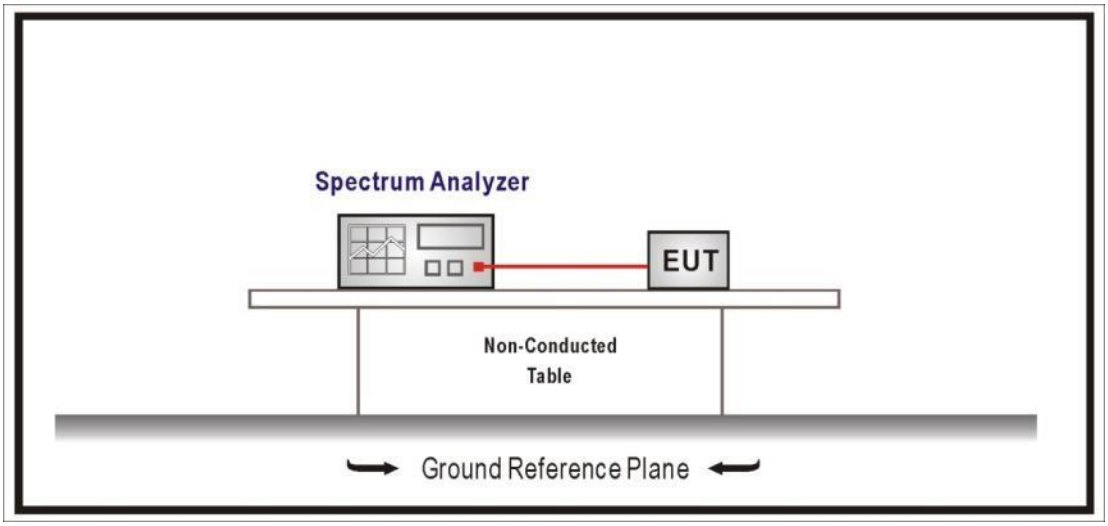


4.4 CarrierFrequencySeparation	VERDICT: PASS

4.4.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(a)
☐	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
☒	Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel.
☐	The 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4
☐	The 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4
☐	Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.

4.4.2 Test Setup



4.4.3 Test Procedure

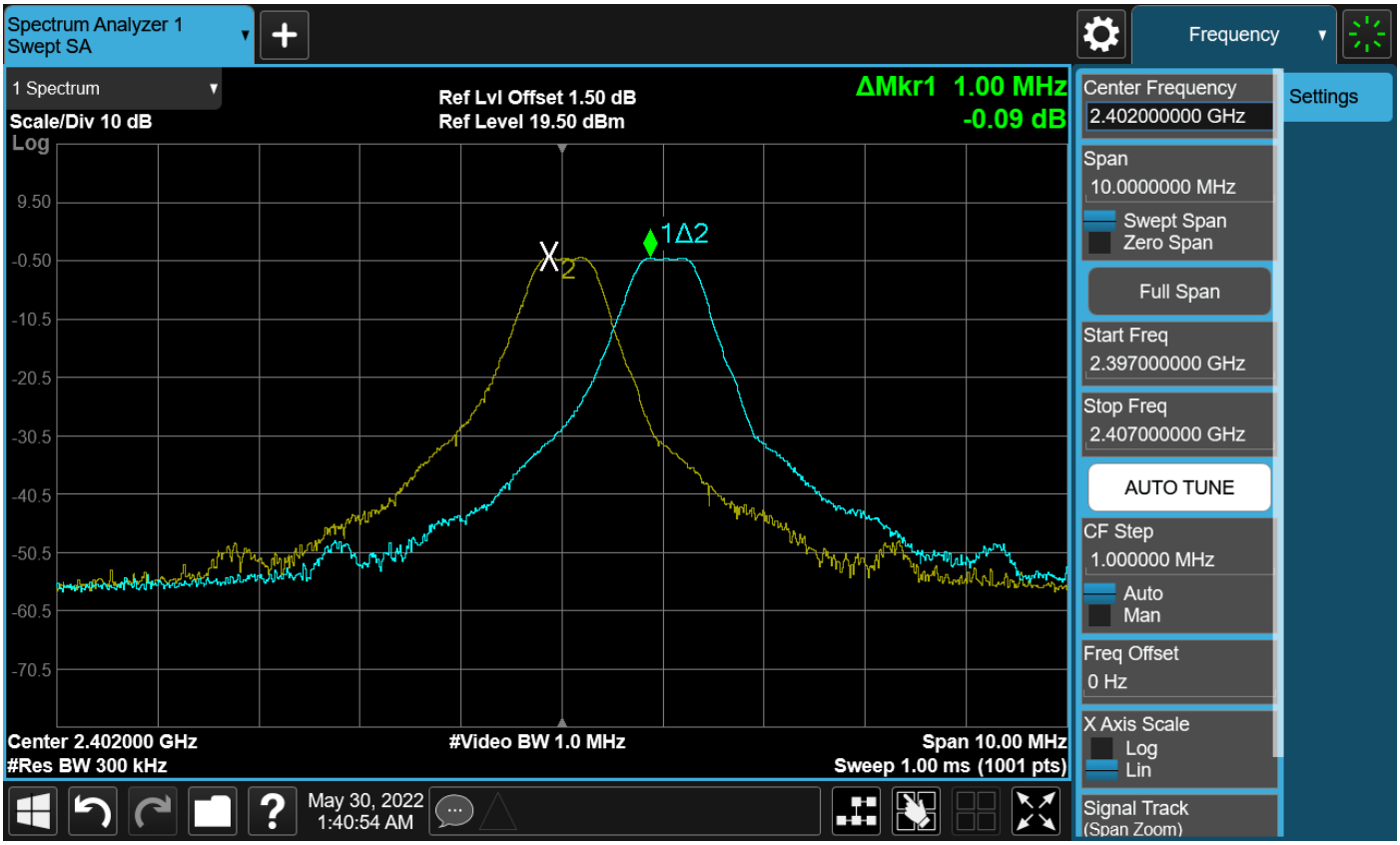
References Rule			Chapter	Description
☒	ANSI C63.10		7.8	Evaluation of frequency-hopping device parameters
	☒	ANSI C63.10	7.8.2	Carrier frequency separation

4.4.4 Test Data

Mode	Channel	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
1	00	2402	1000	884.8	Pass
	39	2441	1000	884.7	Pass
	78	2480	1000	885.2	Pass
2	00	2402	1000	884.7	Pass
	39	2441	1000	883.3	Pass
	78	2480	1000	884.7	Pass
3	00	2402	1000	864.0	Pass
	39	2441	1000	866.0	Pass
	78	2480	1000	866.7	Pass

Note 1: The worst data plot as below:

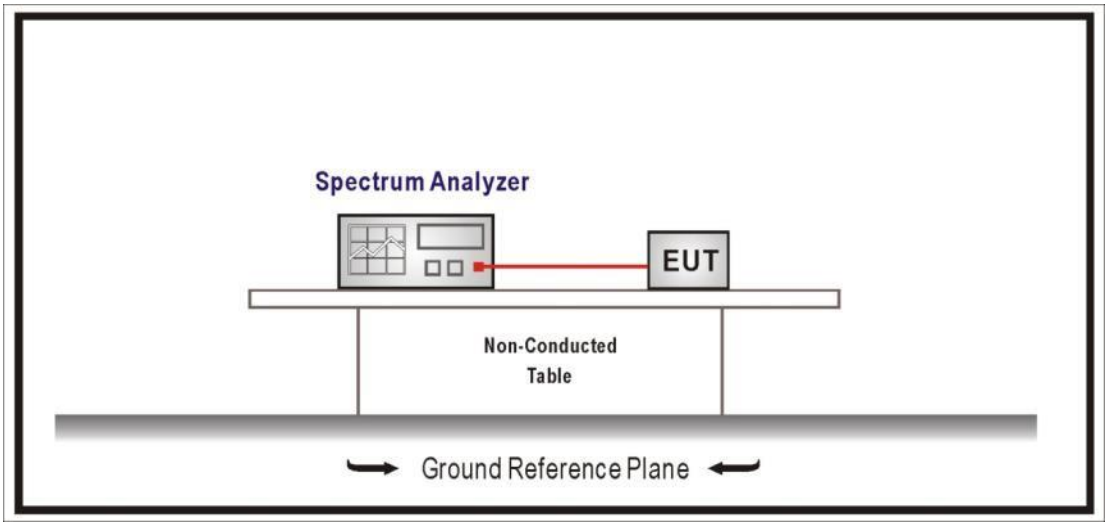
Mode1/CH00/2402MHz



4.5 Number of hopping Frequencies	VERDICT: PASS

4.5.1 Limit	
Standard	FCC Part 15 Subpart C Paragraph 15.247(a)
☒	For frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies.
☐	For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is less than 250 kHz, shall use at least 50 hopping frequencies.
☐	For frequency hopping systems operating in 902-928 MHz band, if the 20 dB bandwidth of the hopping channel is higher than 250 kHz, shall use at least 25 hopping frequencies.
☐	For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.

4.5.2 Test Setup



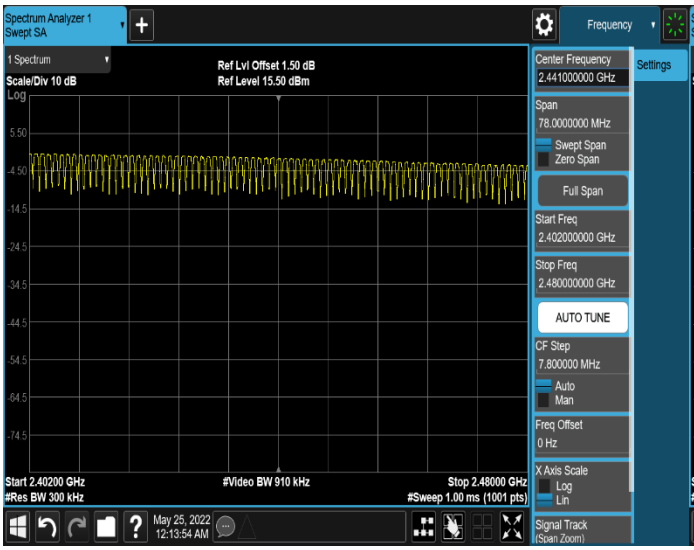
4.5.3 Test Procedure

References Rule			Chapter	Description
☒	ANSI C63.10		7.8.	Evaluation of frequency-hopping device parameters
	☒	ANSI C63.10	7.8.3	Number of Hopping Frequencies

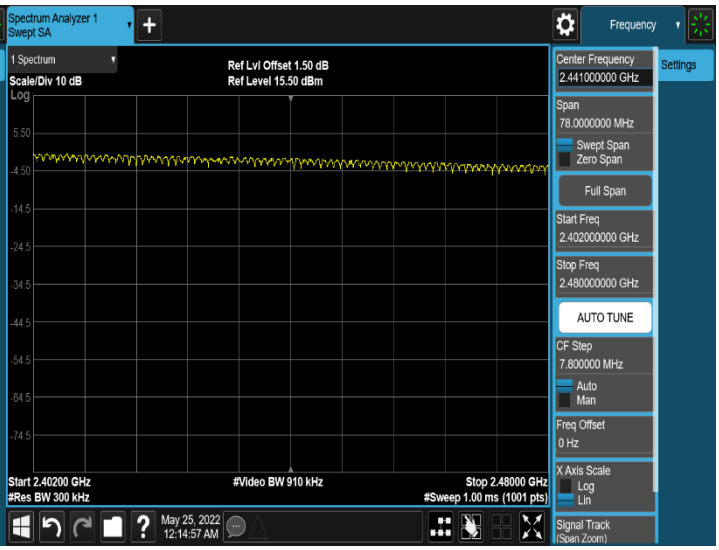
4.5.4 Test Data

Mode	Number of Hopping Frequencies	Limit	Result
1	79	>15	Pass
2	79	>15	Pass
3	79	>15	Pass

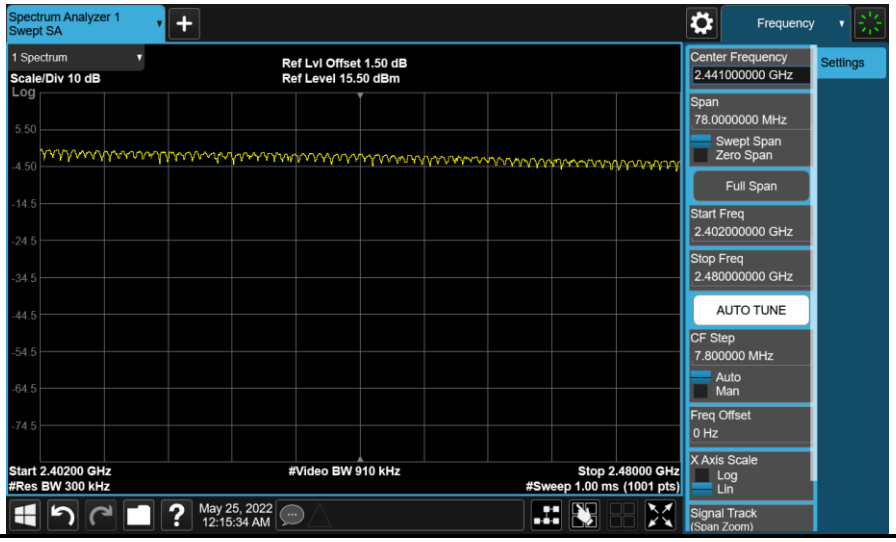
Mode 1



Mode2



Mode 3

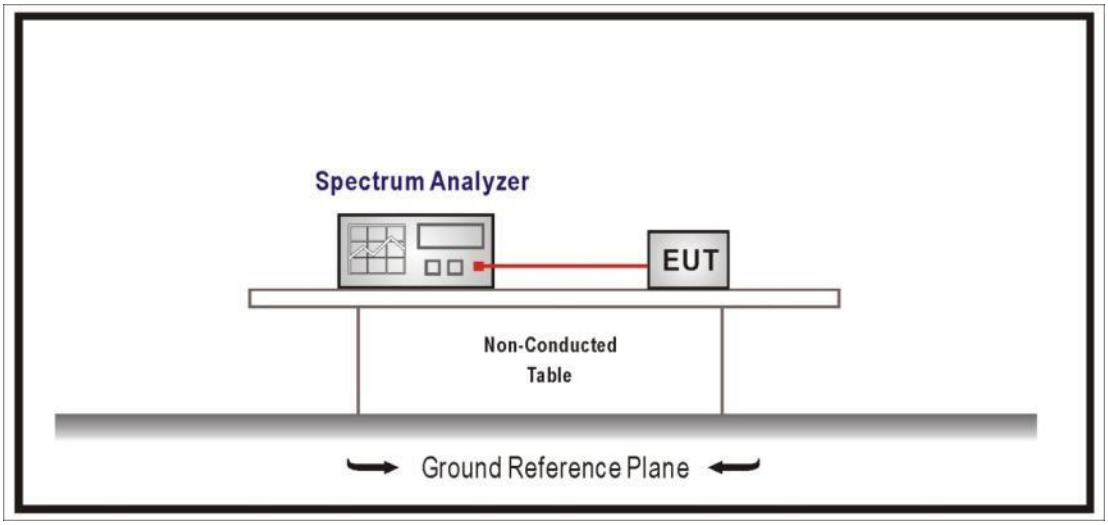


4.6 Time of Occupancy(Dwell Time)	VERDICT: PASS

4.6.1 Limit

Standard	FCC Part 15 Subpart C Paragraph 15.247(a)
☒	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
☐	For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period
☐	For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.
☐	Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

4.6.2 Test Setup



4.6.3 Test Procedure

References Rule			Chapter	Description
☒	ANSI C63.10		7.8	Evaluation of frequency-hopping device parameters
	☒	ANSI C63.10	7.8.4	Time of occupancy (dwell time)

4.6.4 Test Data

Mode	Channel	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
1	39	2441	59.472	< 400	Pass

Note1: Test Time Period: 0.4*79=31.6sec

Note2: Time of Occupancy=0.3717*16*31.6/3.16=59.472ms

Note3: We have evaluated different packet type, shown in the report is the worst data.

Channel 39 (2441MHz) - (DH1)

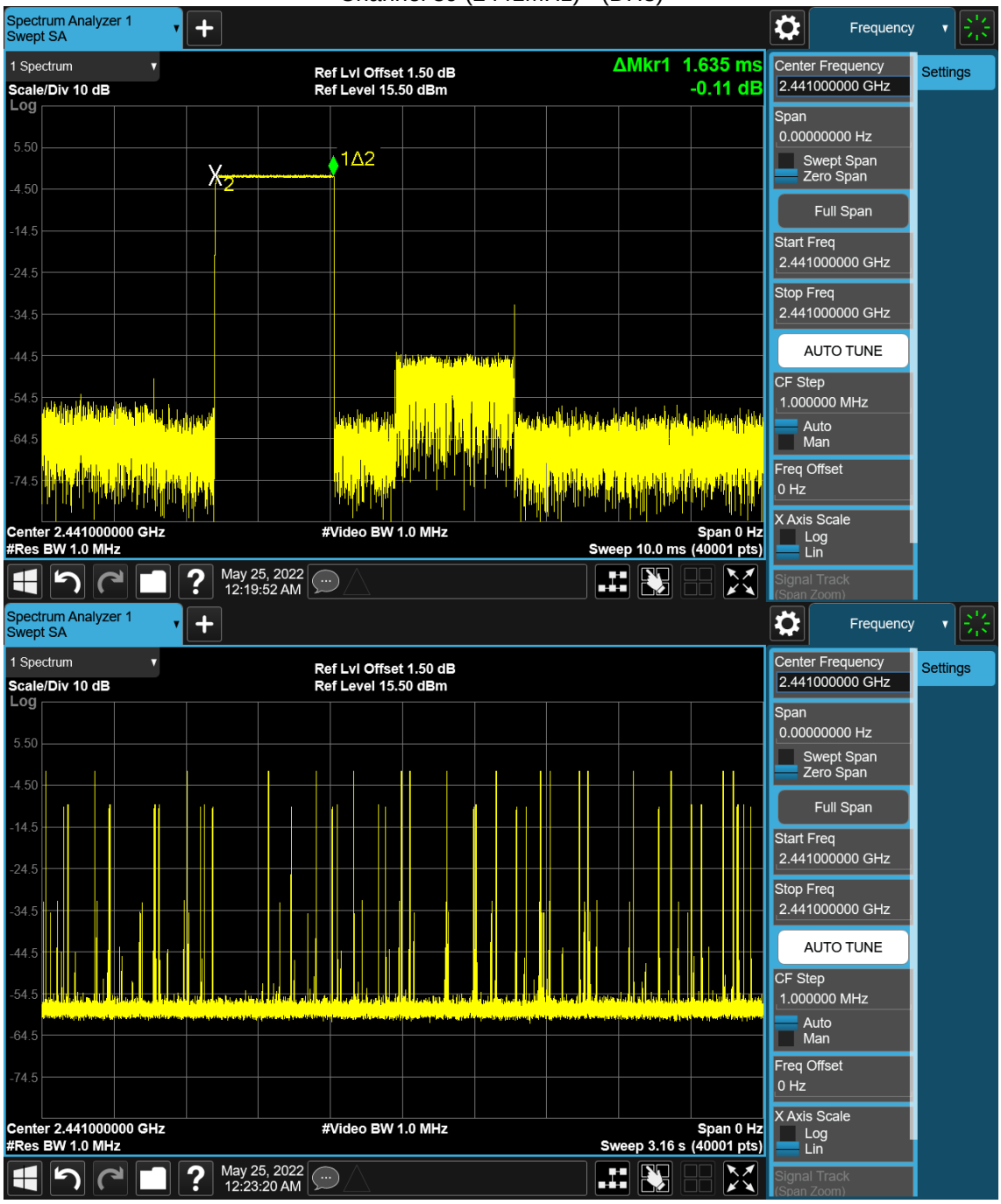
Mode	Channel	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
1	39	2441	294.3	< 400	Pass

Note1: Test Time Period: 0.4*79=31.6sec

Note2: Time of Occupancy=1.635*18*31.6/3.16=294.3ms

Note3: We have evaluated different packet type, shown in the report is the worst data.

Channel 39 (2441MHz) - (DH3)



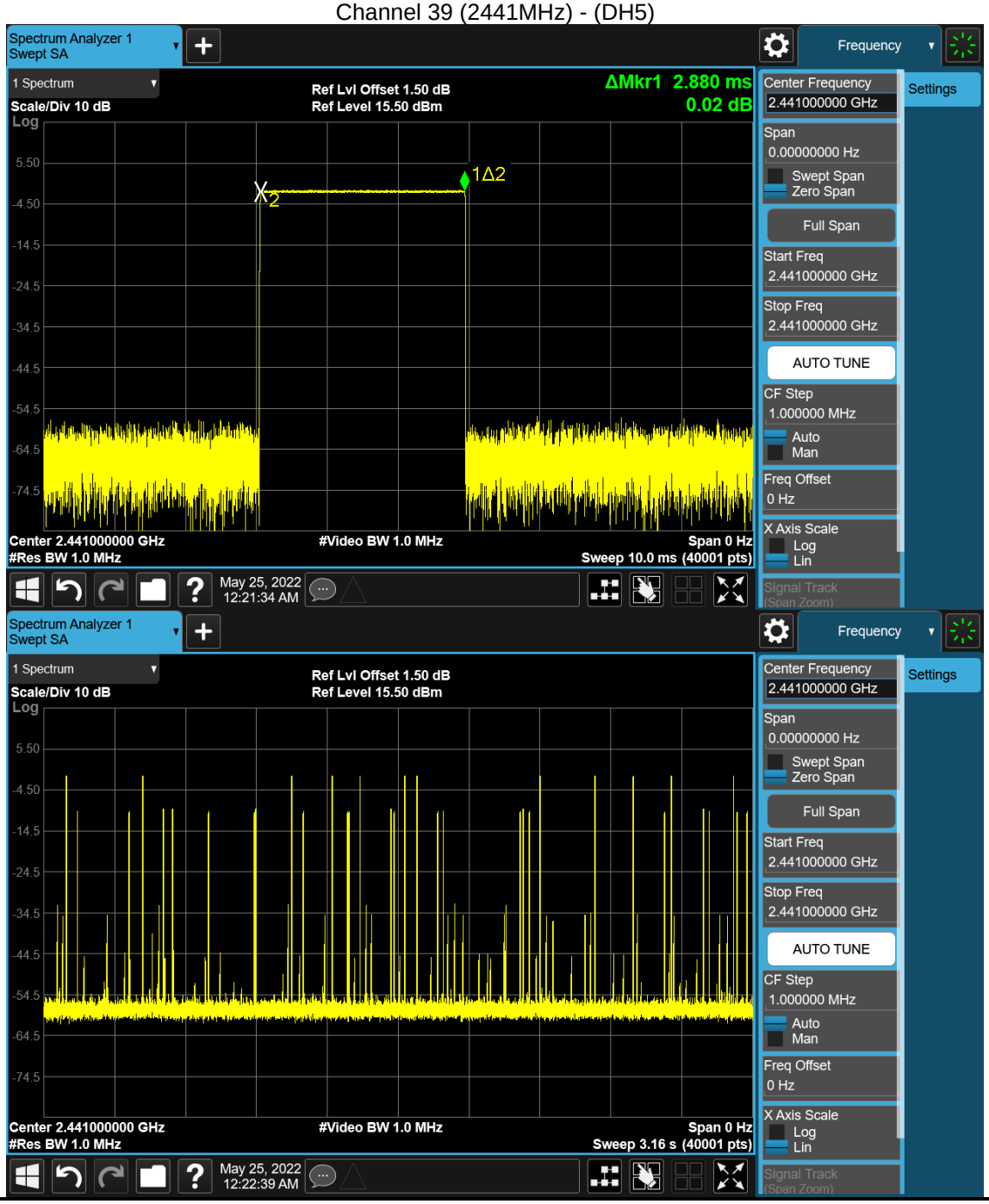
Mode	Channel	Frequency (MHz)	Time of Occupancy (ms)	Limit (ms)	Result
1	39	2441	345.6	< 400	Pass

Note1: Test Time Period: 0.4*79=31.6sec

Note2: Time of Occupancy=2.88*12*31.6/3.16=345.6ms

Note3: We have evaluated different packet type, shown in the report is the worst data.

Channel 39 (2441MHz) - (DH5)

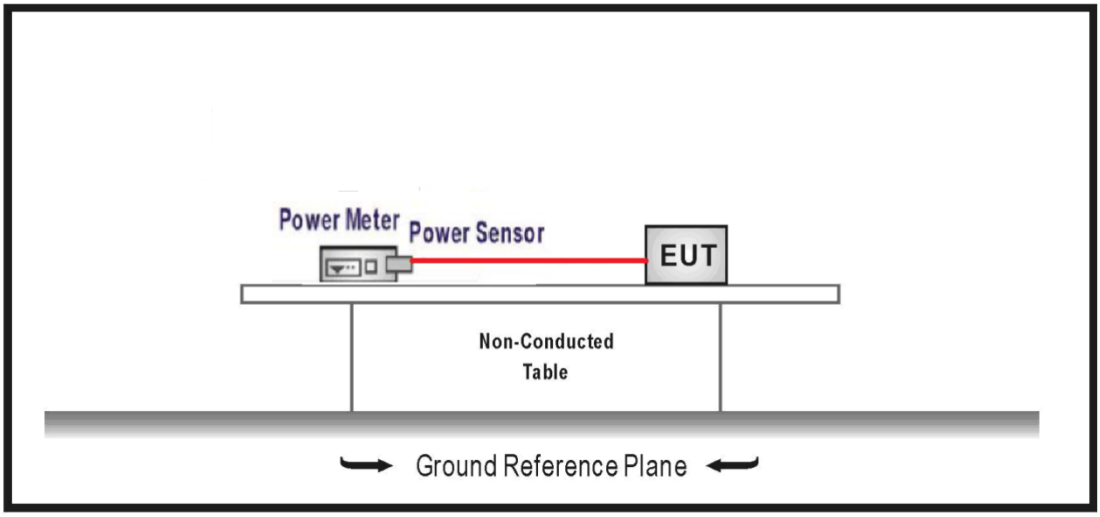


Note: The packet time of AFH mode is same as normal mode, due to the packet time of AFH mode multiply with lesser factor is dwell time of 0.4X20=8S, the dwell time of AFH mode comply with the limit.

4.7 Peak Output Power	VERDICT: PASS

4.7.1 Limit	
Standard	FCC Part 15 Subpart C Paragraph 15.247 (a)(1)
☒	Frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.
☒	Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.
☐	For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels

4.7.2 Test Setup



4.7.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		7.8	Evaluation of frequency-hopping device parameters
	☒	ANSI C63.10	7.8.5	Output power test procedure for frequency-hopping spread-spectrum (FHSS) devices

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Result
Mode 1	00	2402	0.08	≤30	0.08	≤36	Pass
	39	2441	-0.46	≤30	-0.46	≤36	Pass
	78	2480	-0.83	≤30	-0.83	≤36	Pass
Mode 2	00	2402	-0.17	≤21	-0.17	≤36	Pass
	39	2441	-0.59	≤21	-0.59	≤36	Pass
	78	2480	-1.08	≤21	-1.08	≤36	Pass
Mode 3	00	2402	-0.15	≤21	-0.15	≤36	Pass
	39	2441	-0.55	≤21	-0.55	≤36	Pass
	78	2480	-1.01	≤21	-1.01	≤36	Pass

4.8 Emissions in non-restricted frequency band	VERDICT: PASS

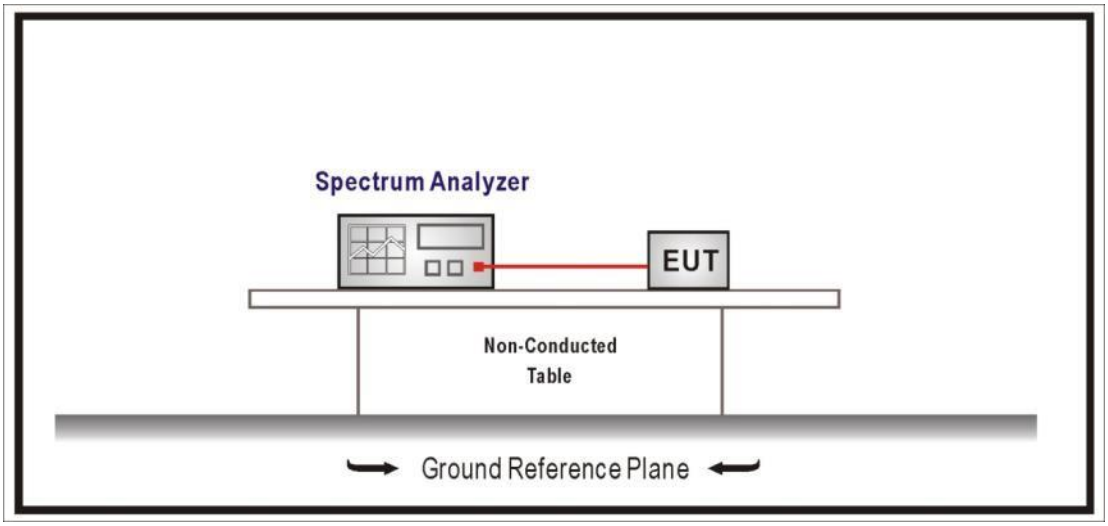
4.8.1 Limit

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).

4.8.2 Test Setup

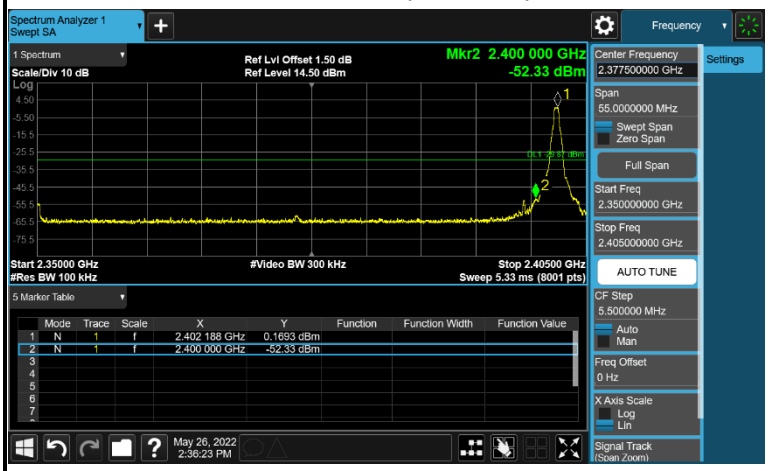


4.8.3 Test Procedure

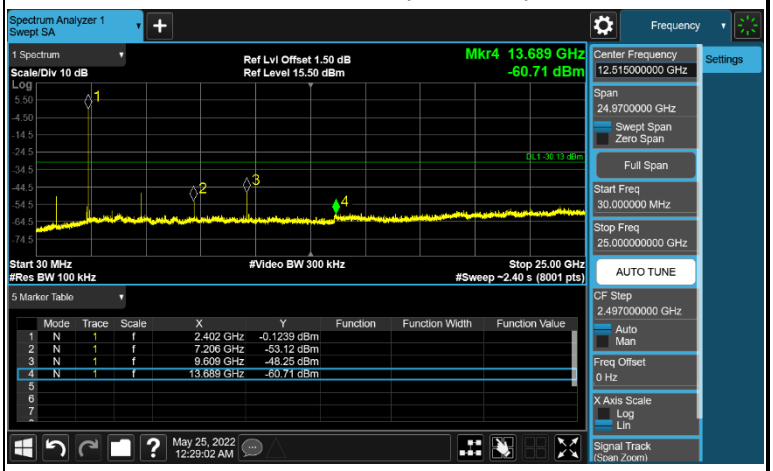
References Rule			Chapter	Description
☒	ANSI C63.10		7.8	Evaluation of frequency-hopping device parameters
	☒	ANSI C63.10	7.8.6	Band-edge measurements for RF conducted emissions

4.8.4 Test Data

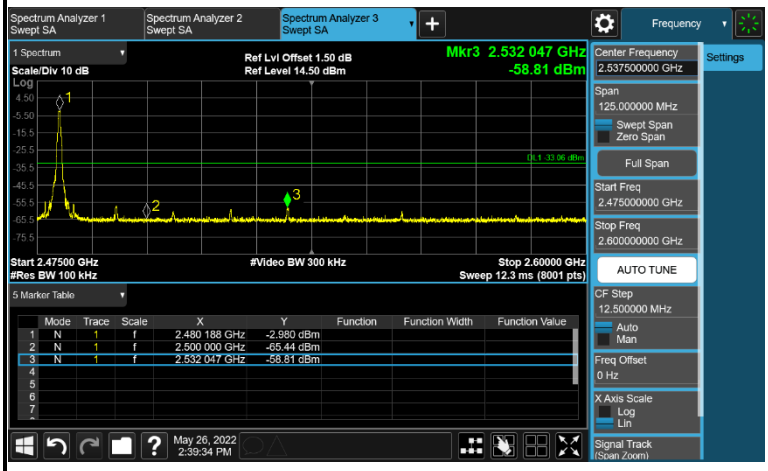
Mode 1 CH00(2402MHz)



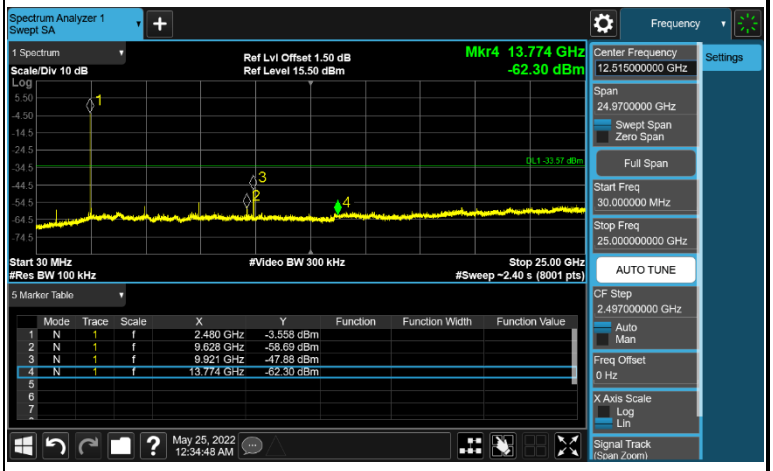
Mode 1 CH00(2402MHz)



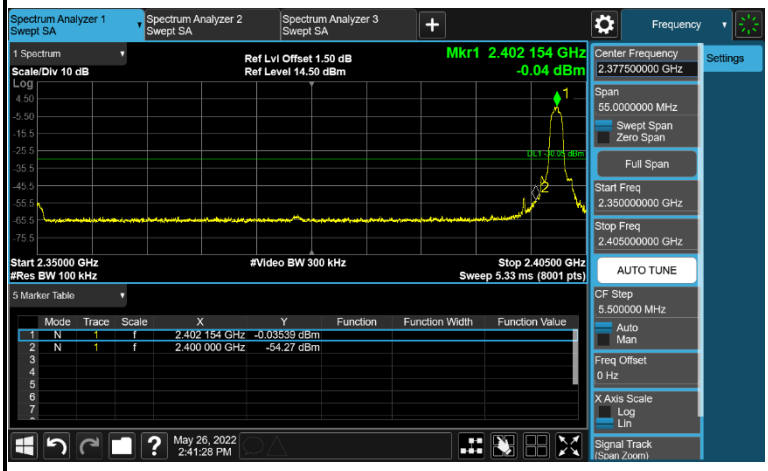
Mode 1 CH78(2480MHz)



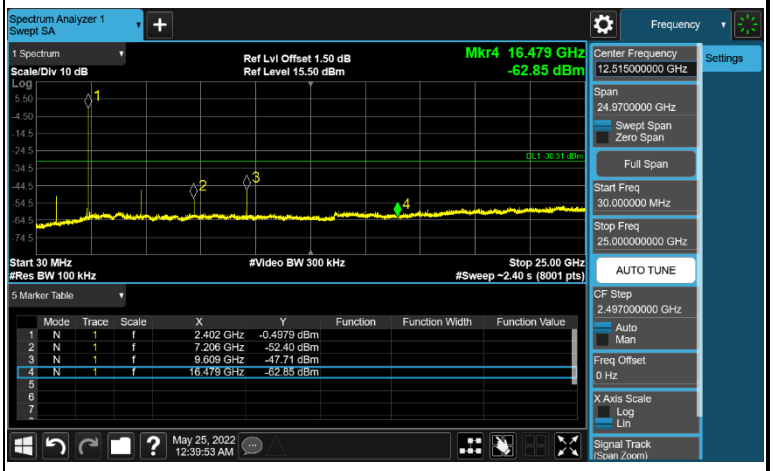
Mode 1 CH78(2480MHz)



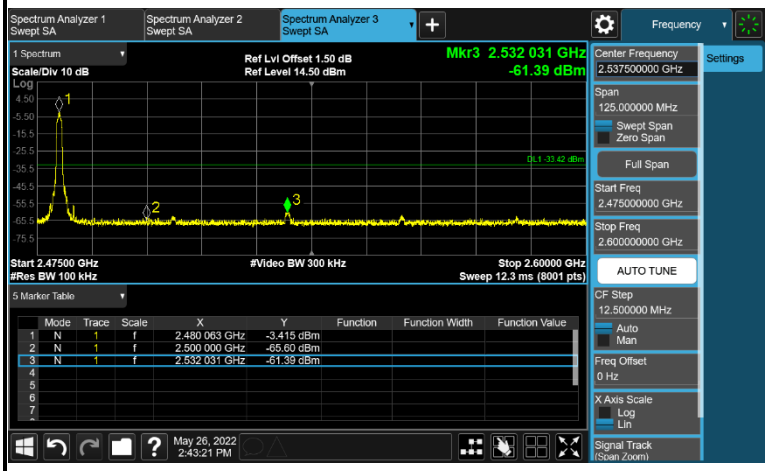
Mode 2 CH00(2402MHz)



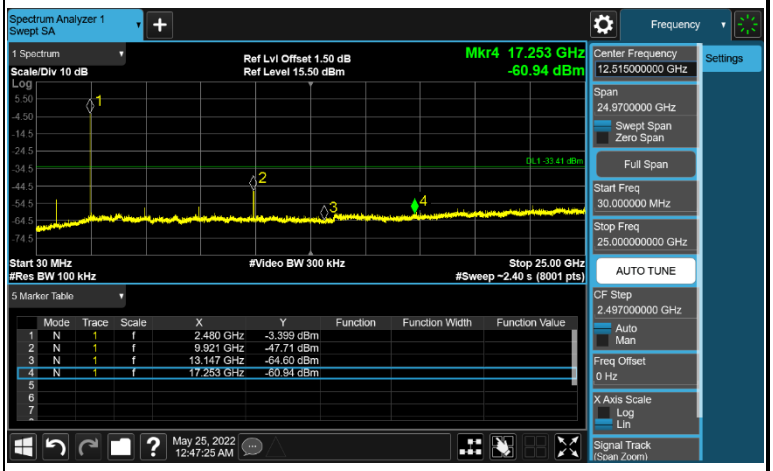
Mode 2 CH00(2402MHz)



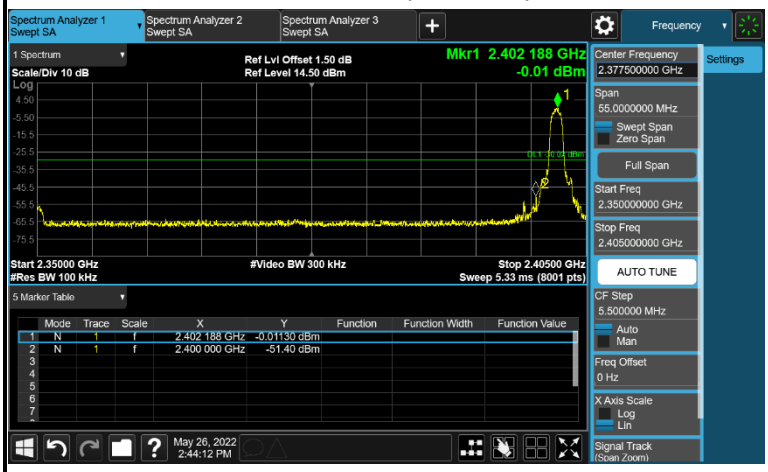
Mode 2 CH78(2480MHz)



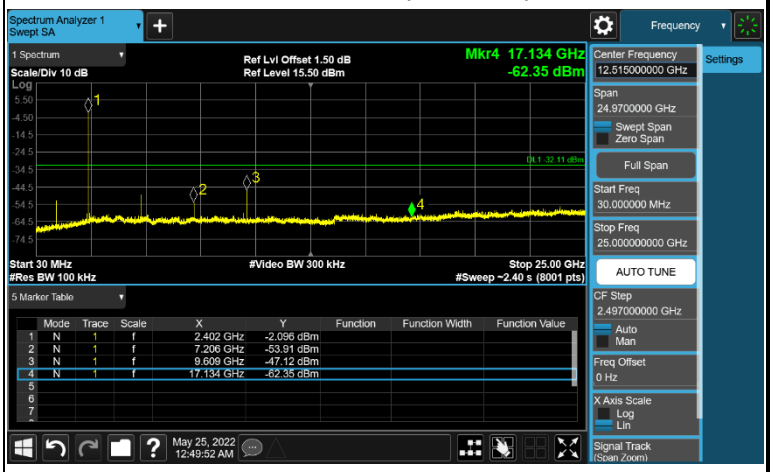
Mode 2 CH78(2480MHz)



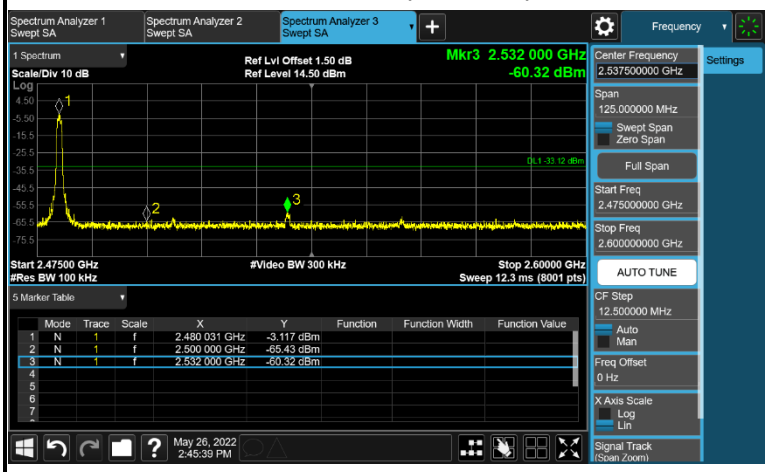
Mode 3 CH00(2402MHz)



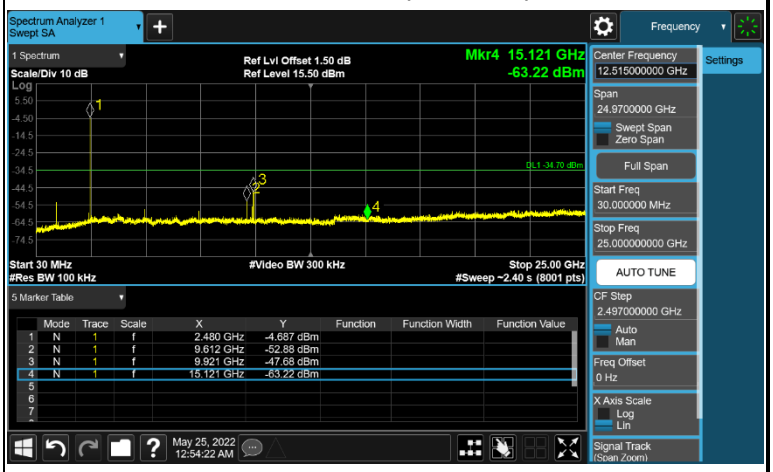
Mode 3 CH00(2402MHz)



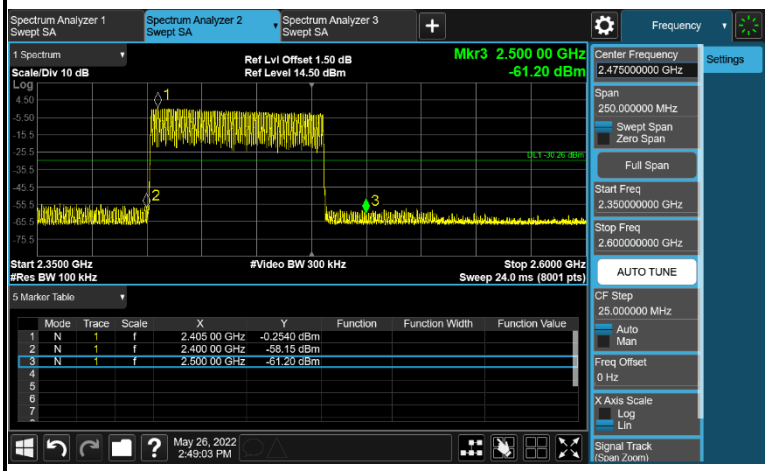
Mode 3 CH78(2480MHz)



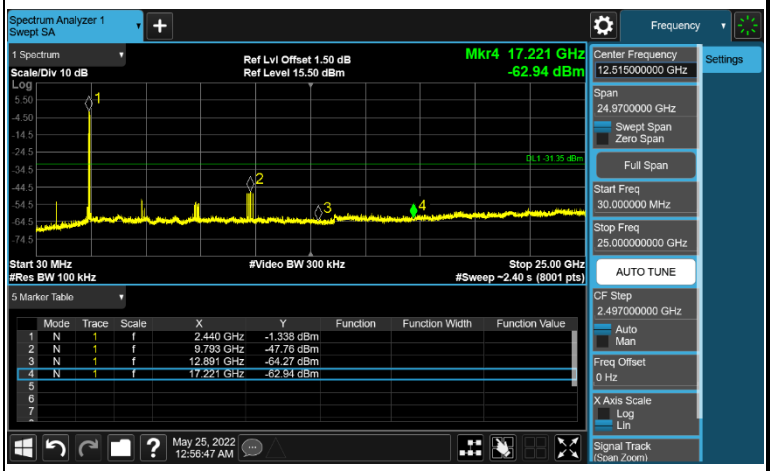
Mode 3 CH78(2480MHz)



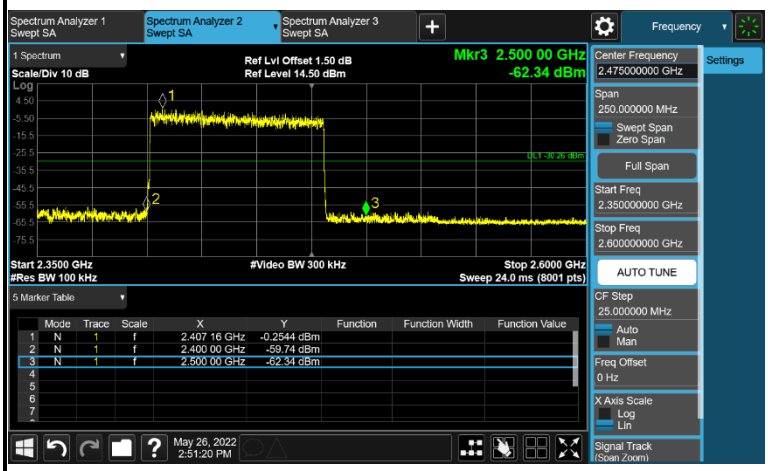
Mode 4（DH5- Hopping）



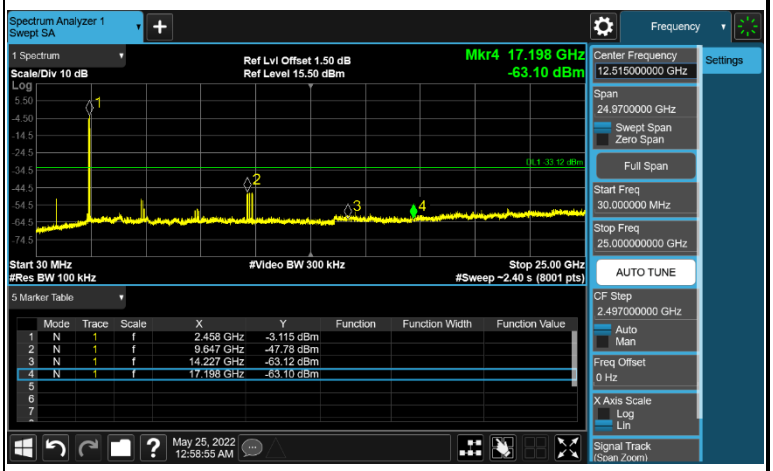
Mode 4（DH5- Hopping）



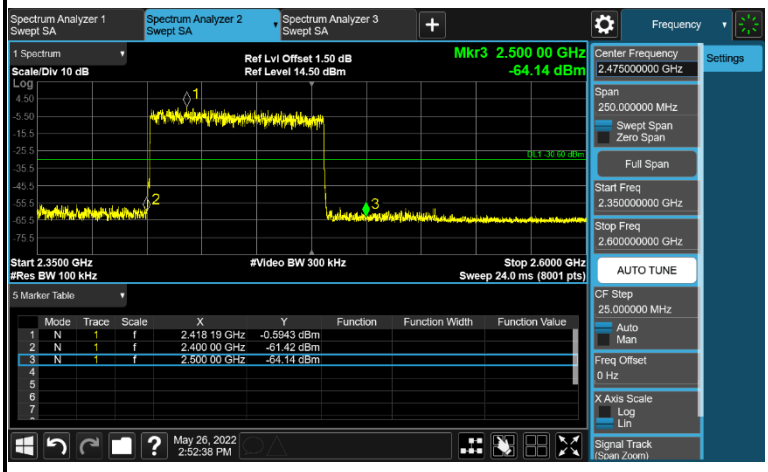
Mode 5（2DH5- Hopping）



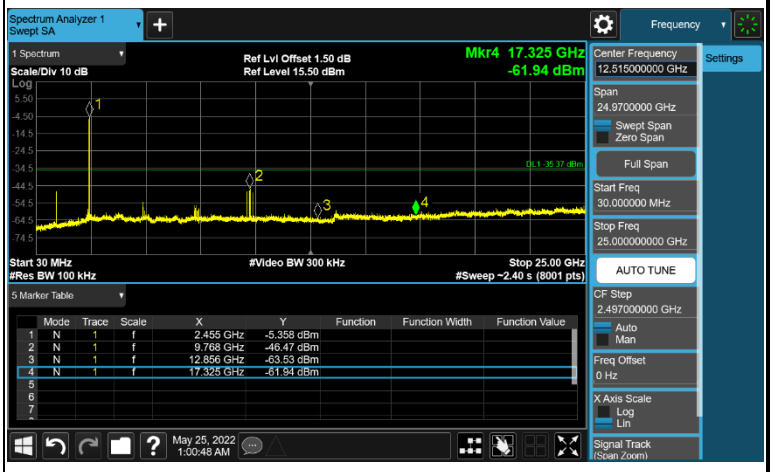
Mode 5（2DH5- Hopping）



Mode 6 （3DH5- Hopping）



Mode 6（3DH5- Hopping）

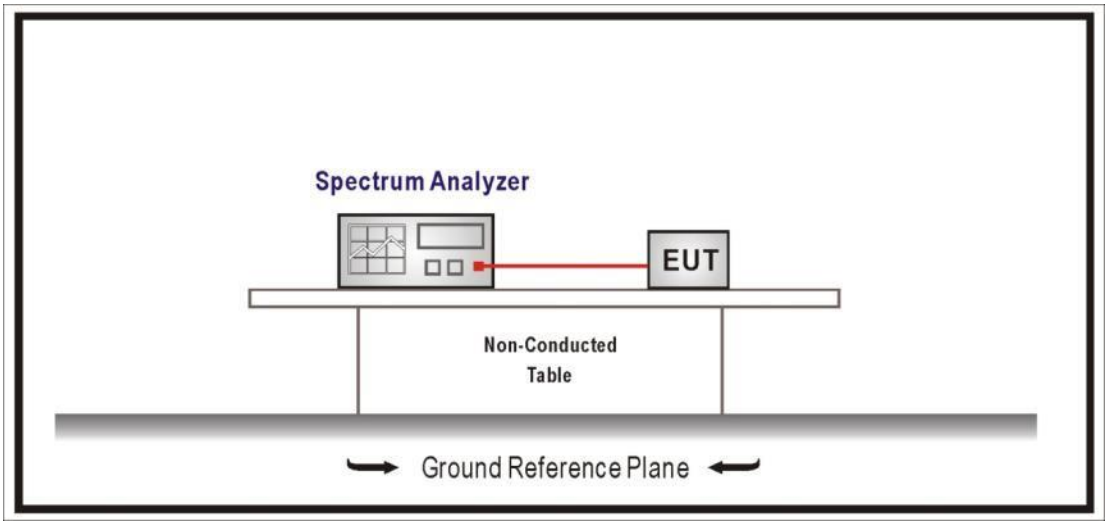


4.9 Duty cycle	VERDICT: PASS

4.9.1 Limit

N/A

4.9.2 Test Setup



4.9.3 Test Procedure

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

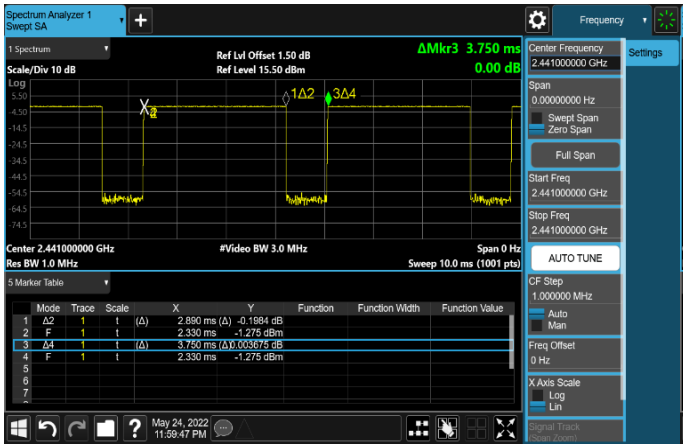
4.9.4 Test Data

Test Mode	Tx On (ms)	Tx Off (ms)	VBW (kHz)	Tx On + Tx Off (ms)	Duty Cycle (%)
Mode 1	2.89	0.86	0.5	3.75	77.07
Mode 2	2.90	0.85	0.5	3.75	77.33
Mode 3	2.89	0.86	0.5	3.75	77.07

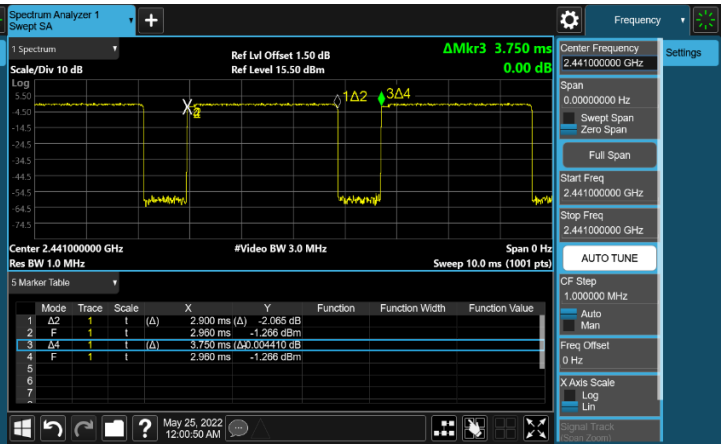
Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

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

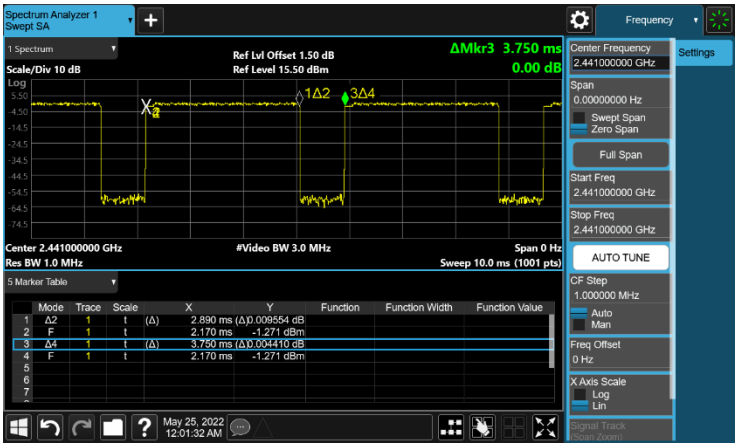
Mode 1 CH39 2441MHz



Mode 2 CH39 2441MHz



Mode 3 CH39 2441MHz

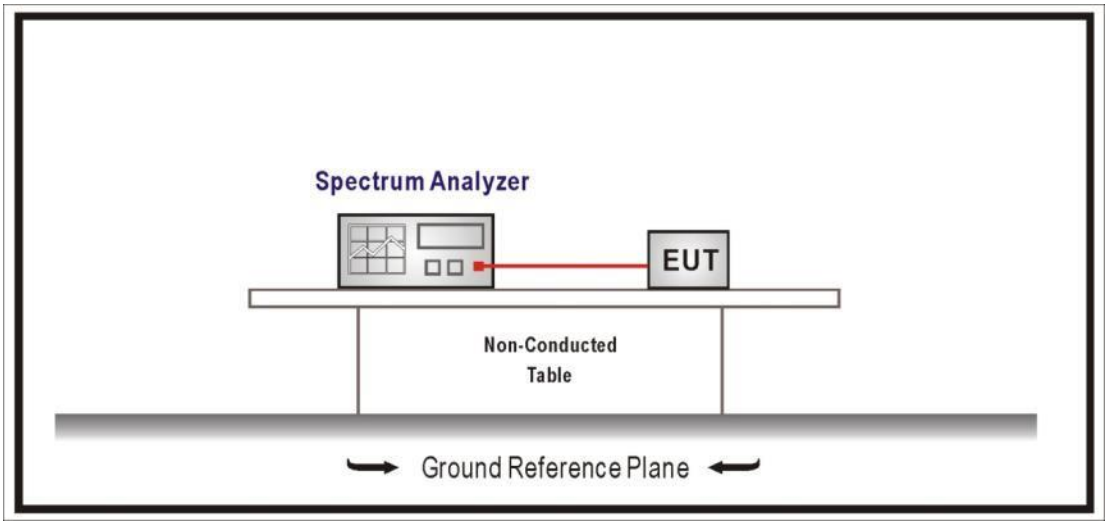


4.10 Band Edge — VERDICT: PASS

4.10.1 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 2483.5-2500	PK	74	1	3
	AV	54	1	3
Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.				

4.10.2 Test Setup



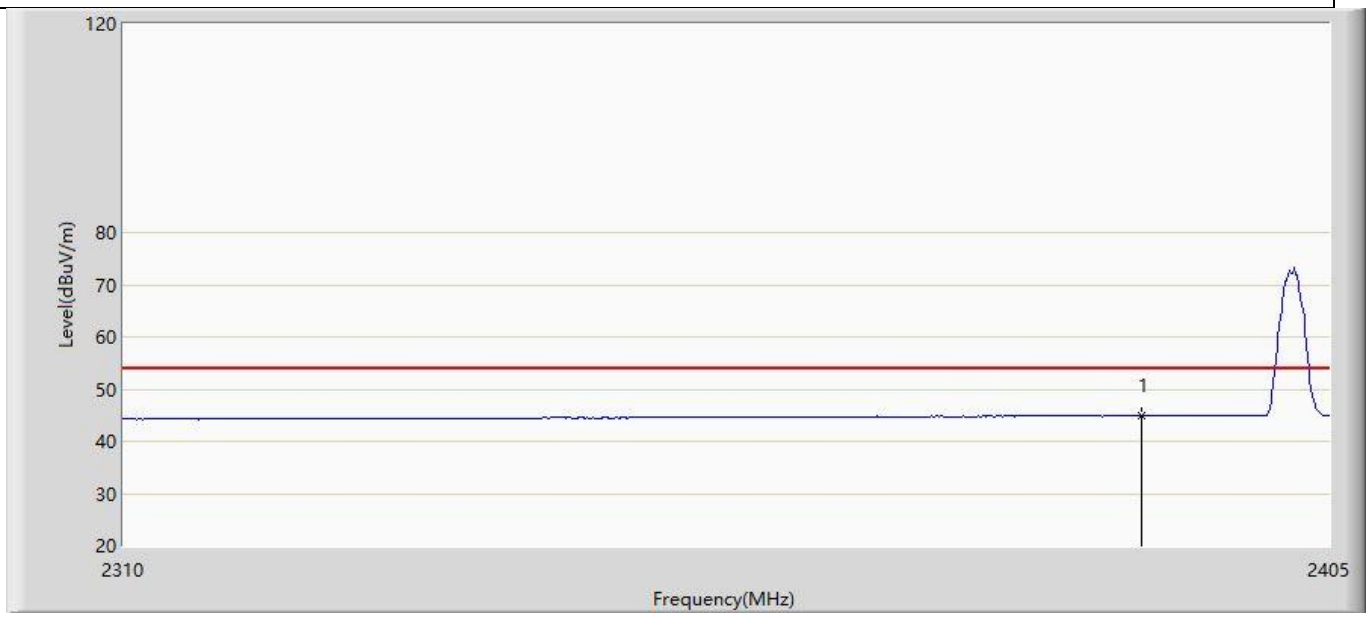
4.10.3 Test Procedure

Test Method

	References Rule		Chapter	Description
☐	DA 00-705		N/A	duty cycle correction factor
☒	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		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

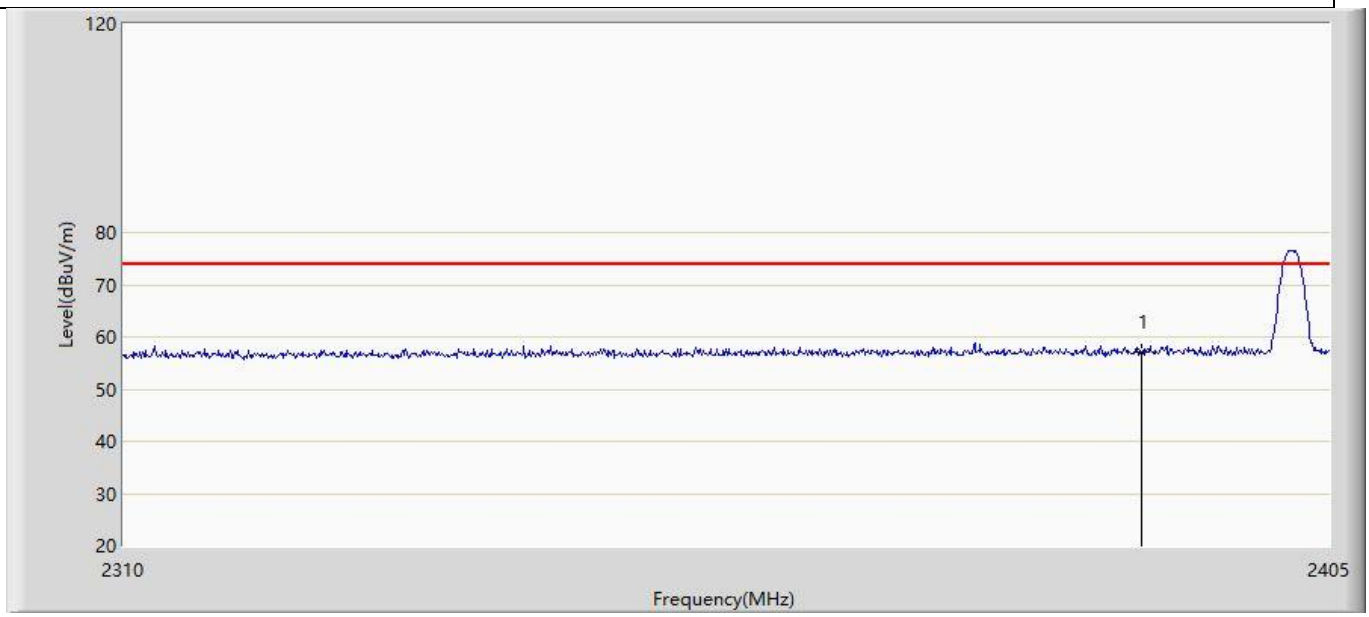
4.10.4 Test Data

Profile: 2250118R	Page No.: 1
Engineer: Pengchengyang	
Site: AC5	Time: 2020/03/12 - 00:39
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



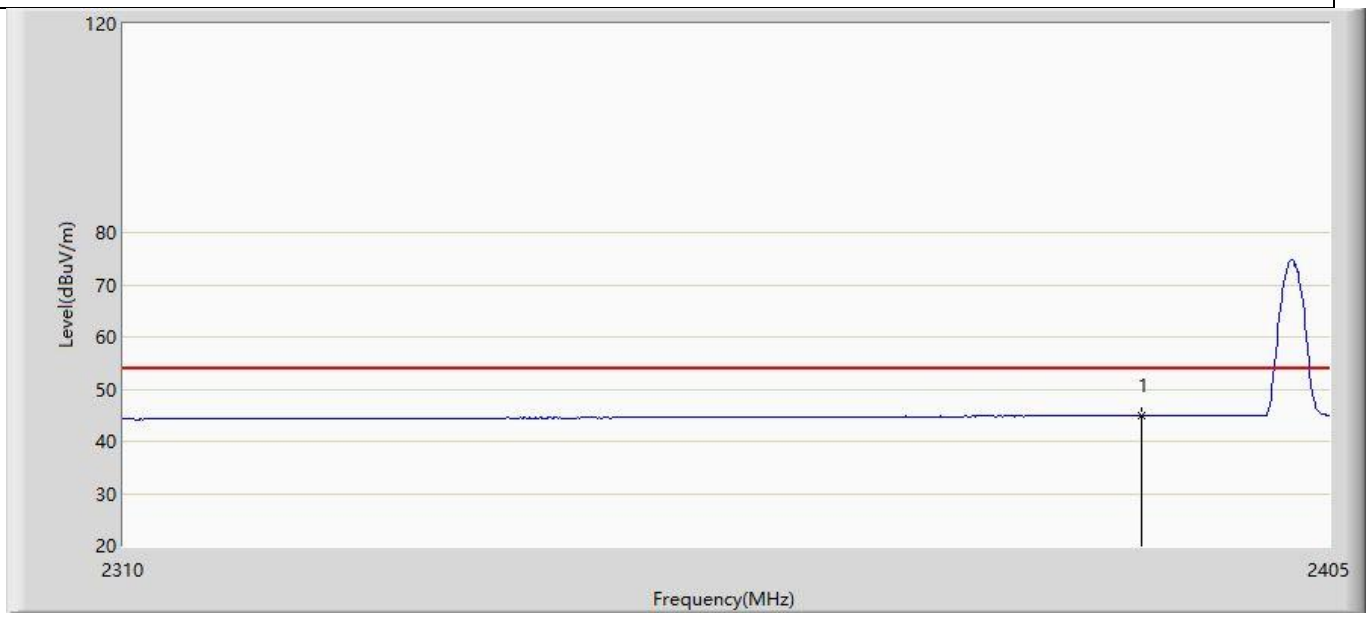
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.905	13.763	-9.095	54.000	31.141	AV

Profile: 2250118R	Page No.: 2
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:38
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



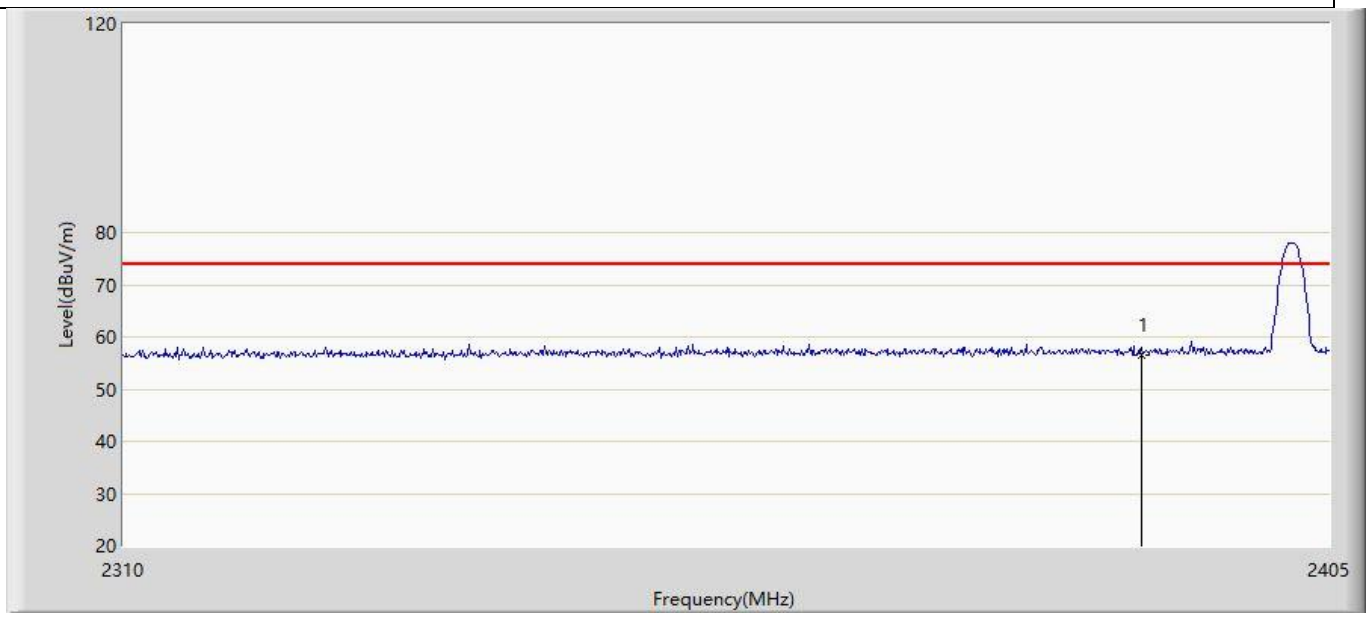
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	57.205	26.063	-16.795	74.000	31.141	PK

Profile: 2250118R	Page No.: 3
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:39
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



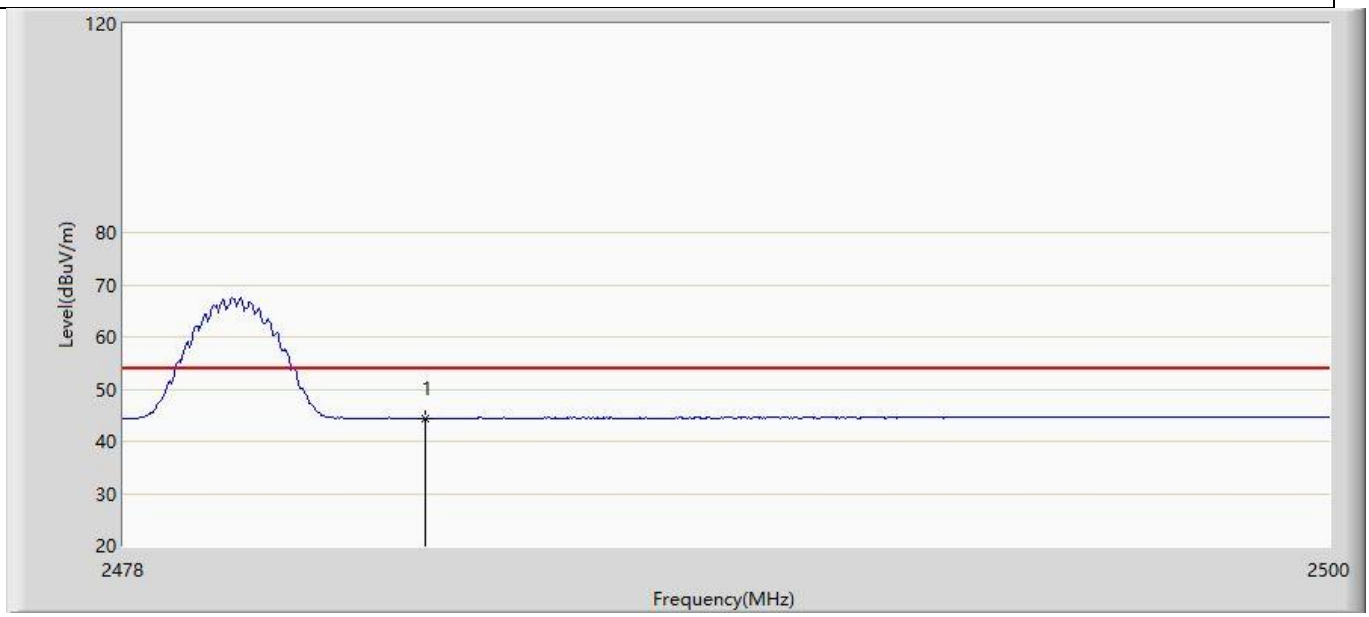
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.988	13.846	-9.012	54.000	31.141	AV

Profile: 2250118R	Page No.: 4
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:43
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2402MHz by DH5	



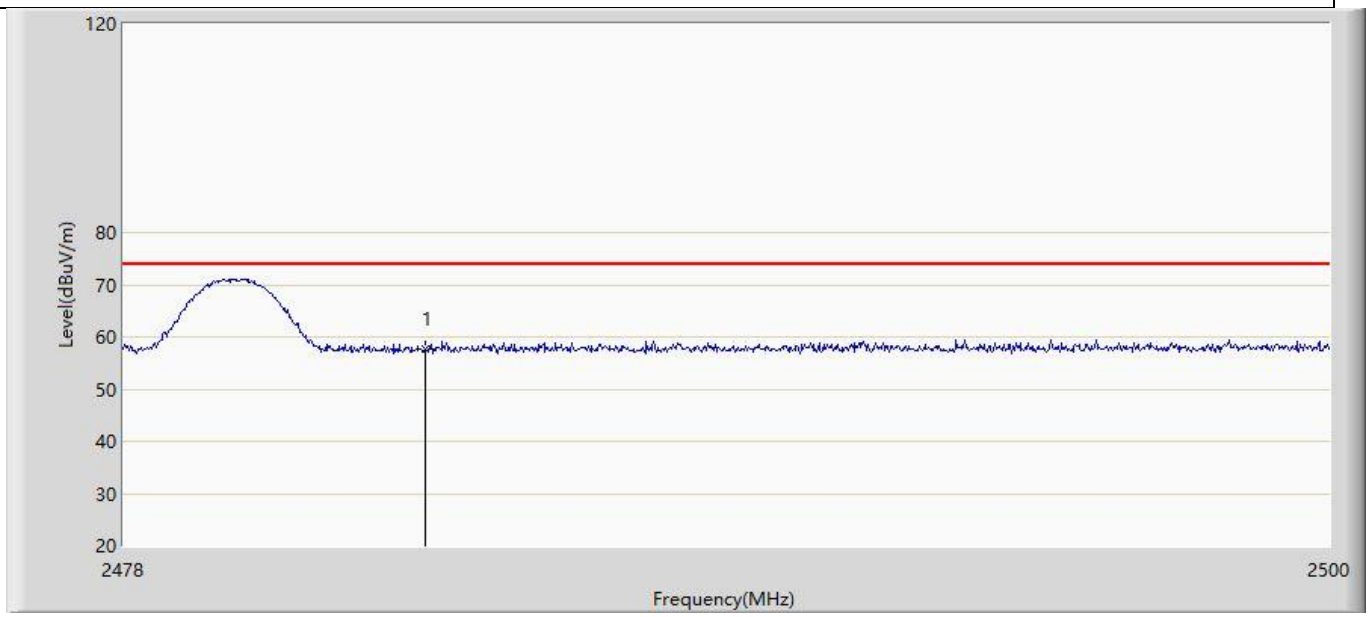
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	56.550	25.408	-17.450	74.000	31.141	PK

Profile: 2250118R	Page No.: 5
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:45
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



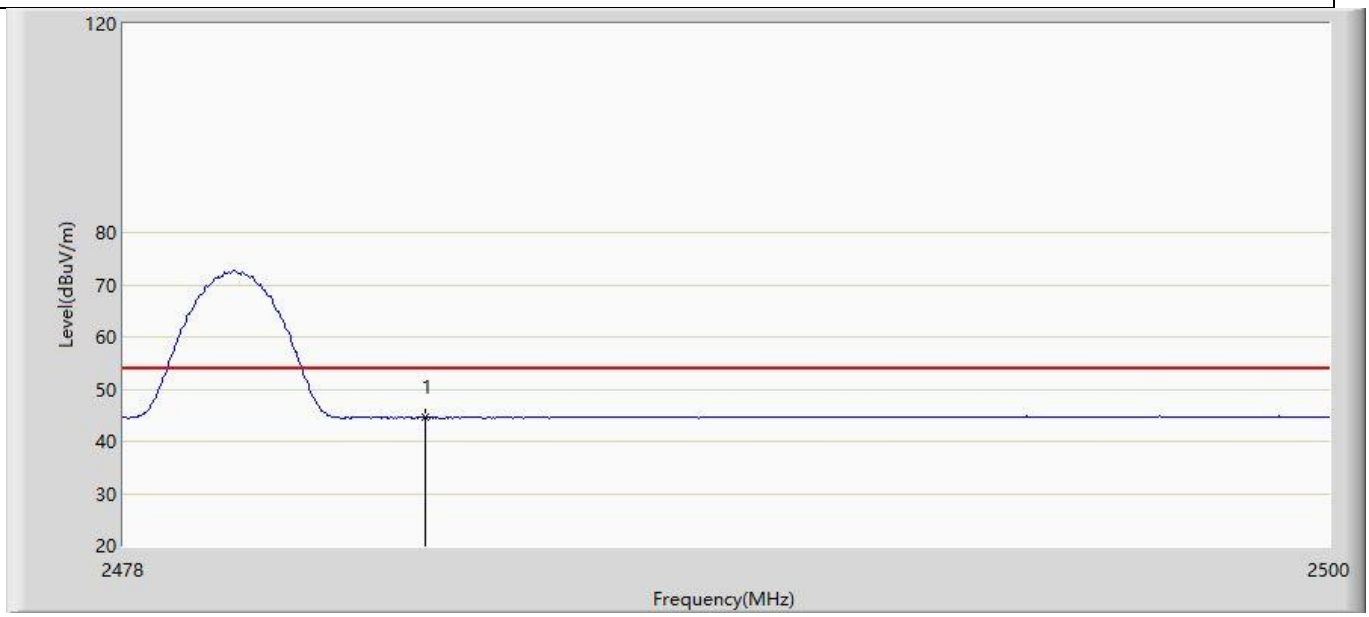
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.418	12.992	-9.582	54.000	31.426	AV

Profile: 2250118R	Page No.: 6
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:48
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



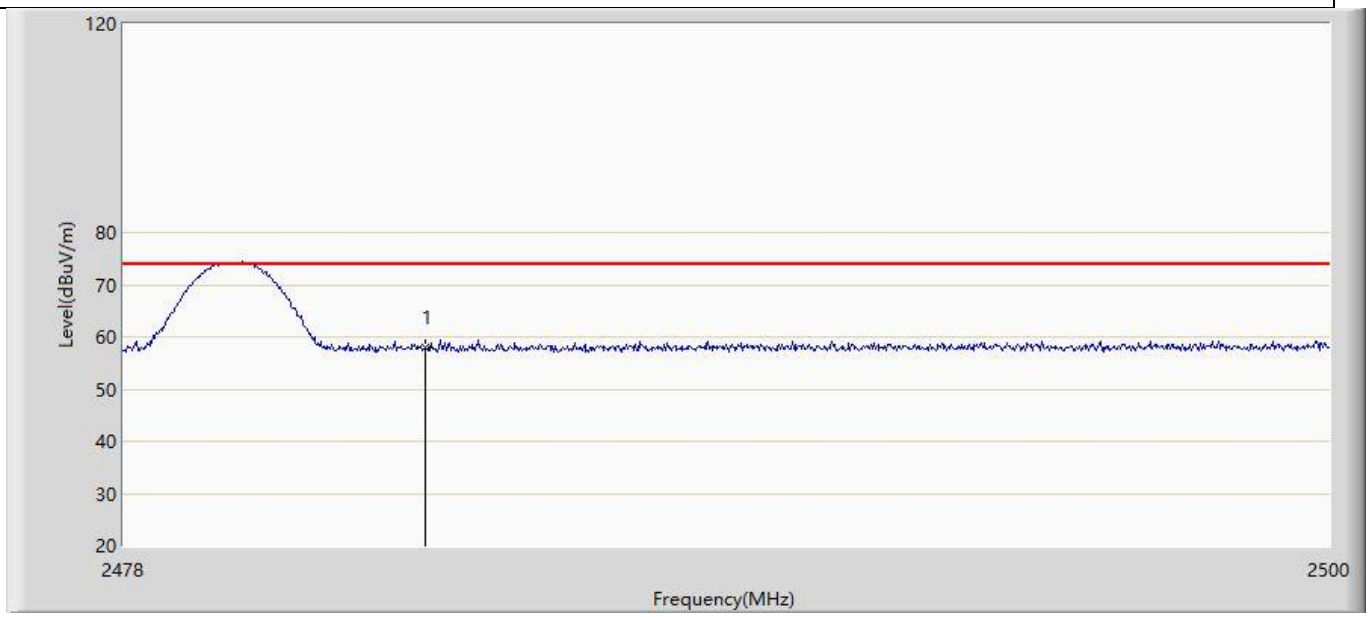
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.572	26.146	-16.428	74.000	31.426	PK

Profile: 2250118R	Page No.: 7
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:49
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



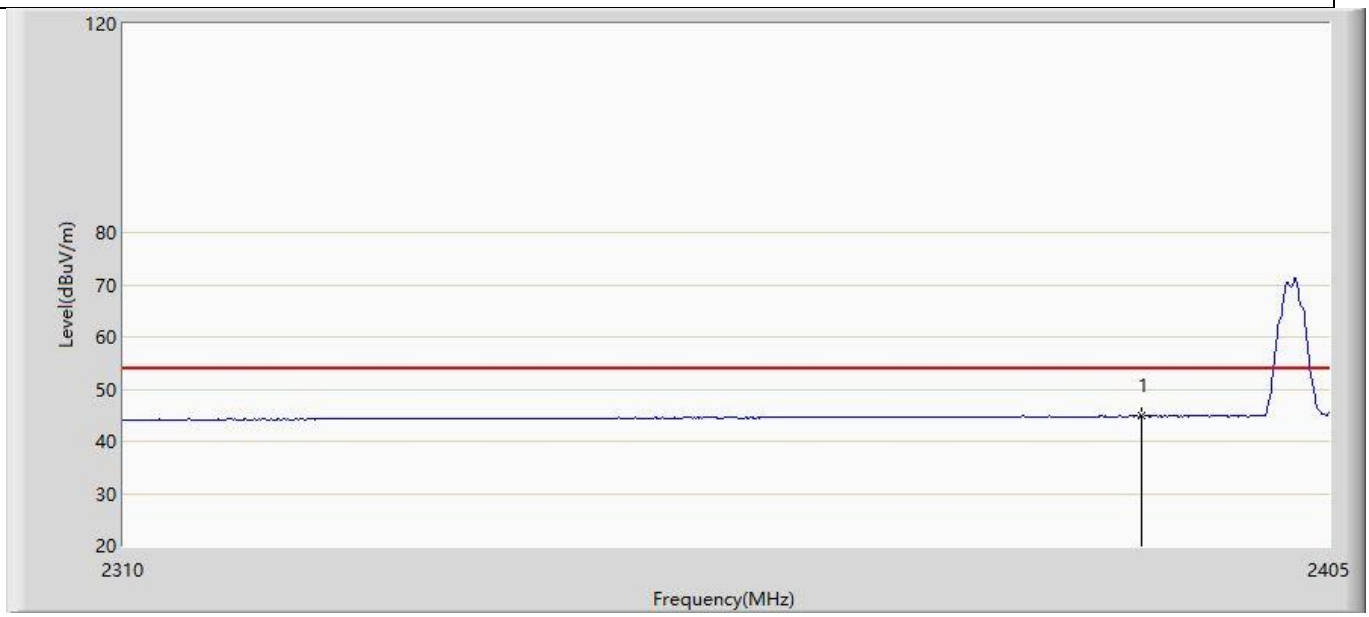
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.530	13.104	-9.470	54.000	31.426	AV

Profile: 2250118R	Page No.: 8
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:52
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 1:Transmit at 2480MHz by DH5	



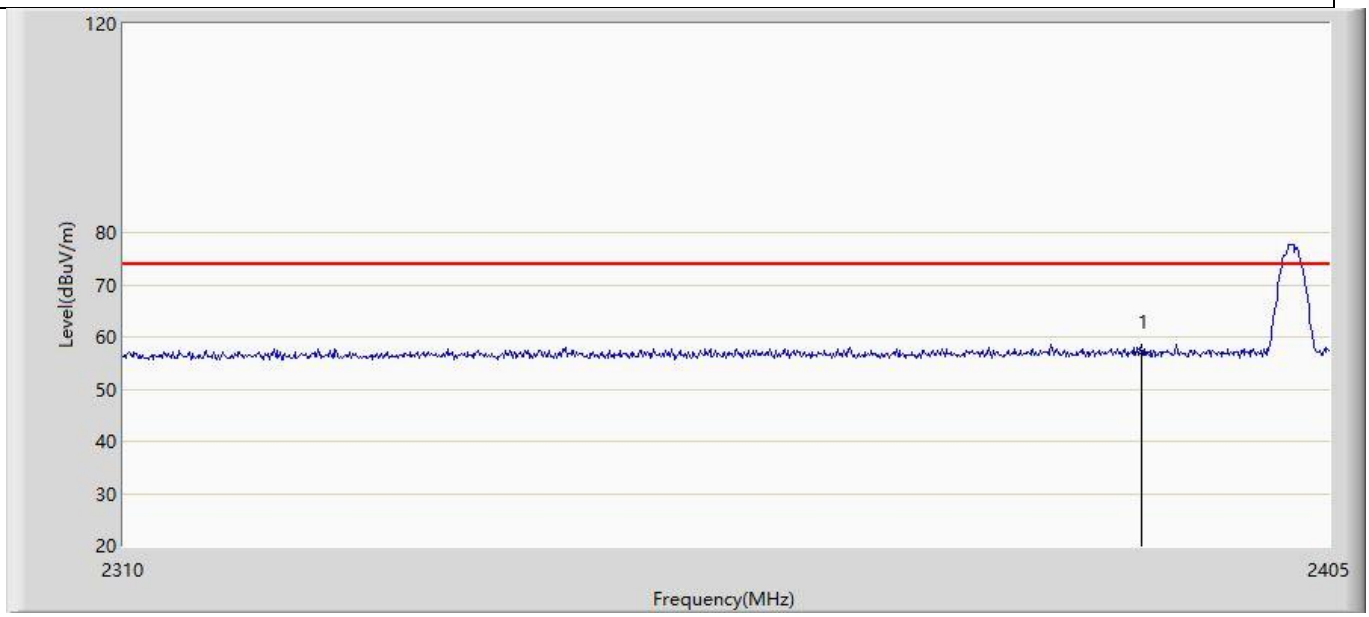
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.944	26.518	-16.056	74.000	31.426	PK

Profile: 2250118R	Page No.: 9
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:54
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2402MHz by 2DH5	



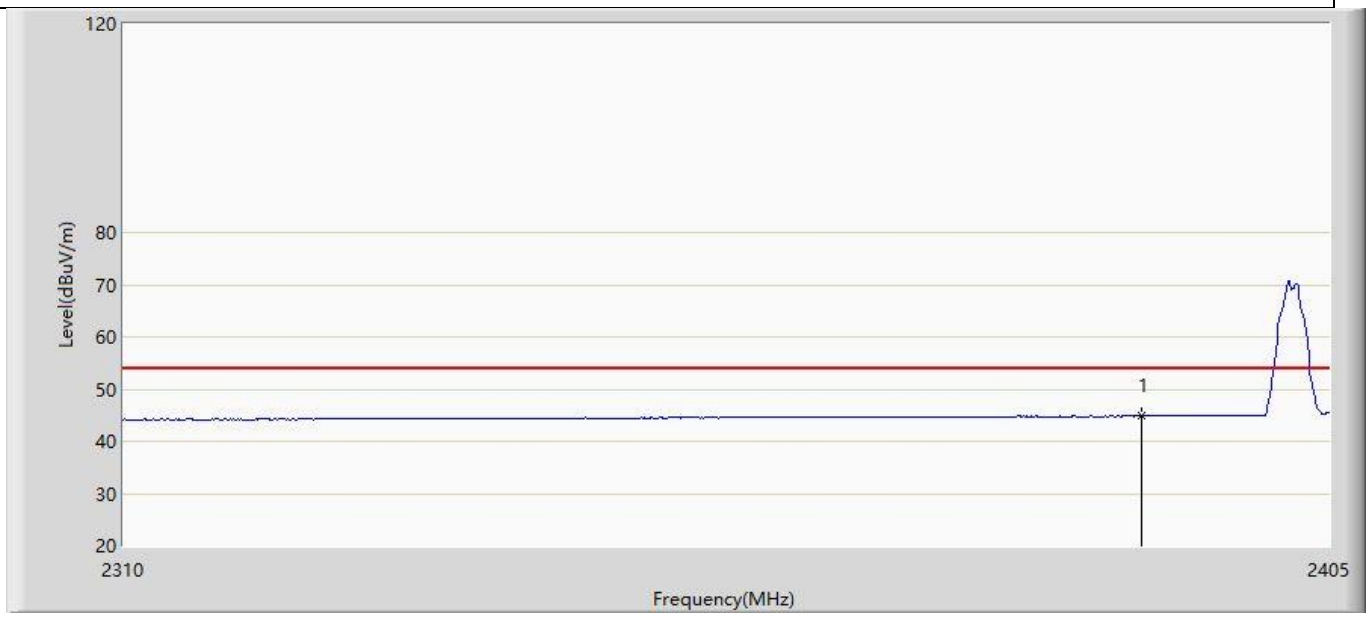
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.799	13.657	-9.201	54.000	31.141	AV

Profile: 2250118R	Page No.: 10
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 19:57
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2402MHz by 2DH5	



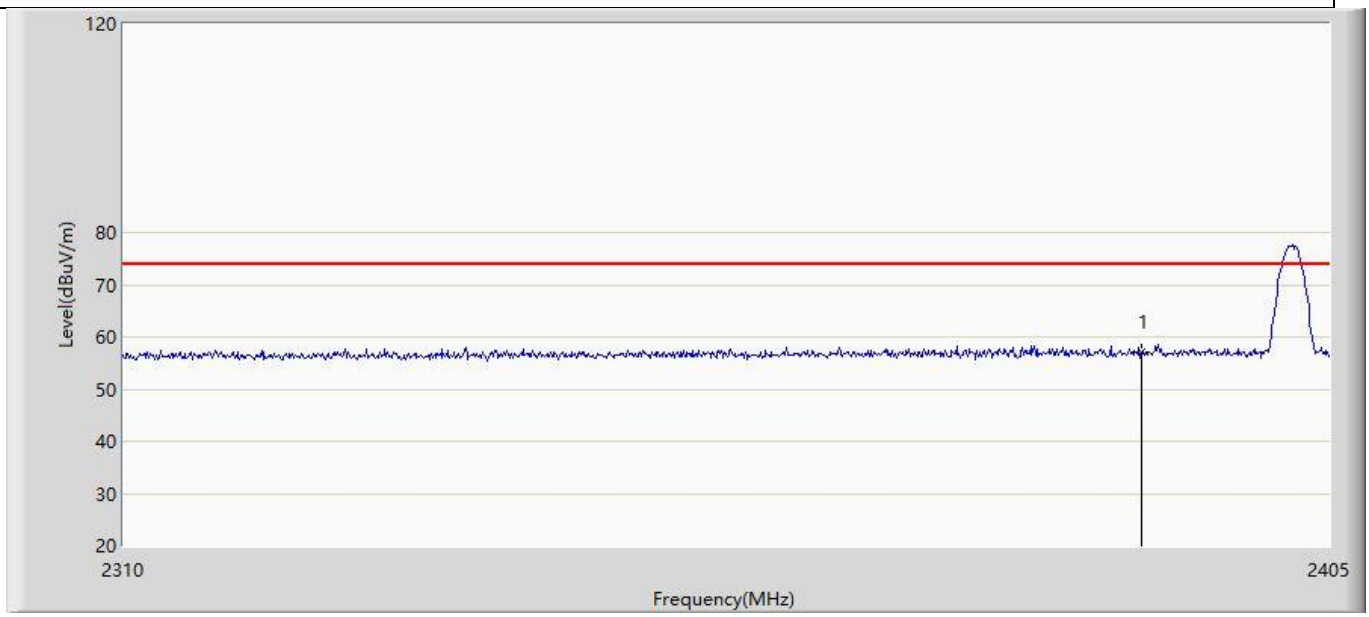
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	57.151	26.009	-16.849	74.000	31.141	PK

Profile: 2250118R	Page No.: 11
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:11
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2402MHz by 2DH5	



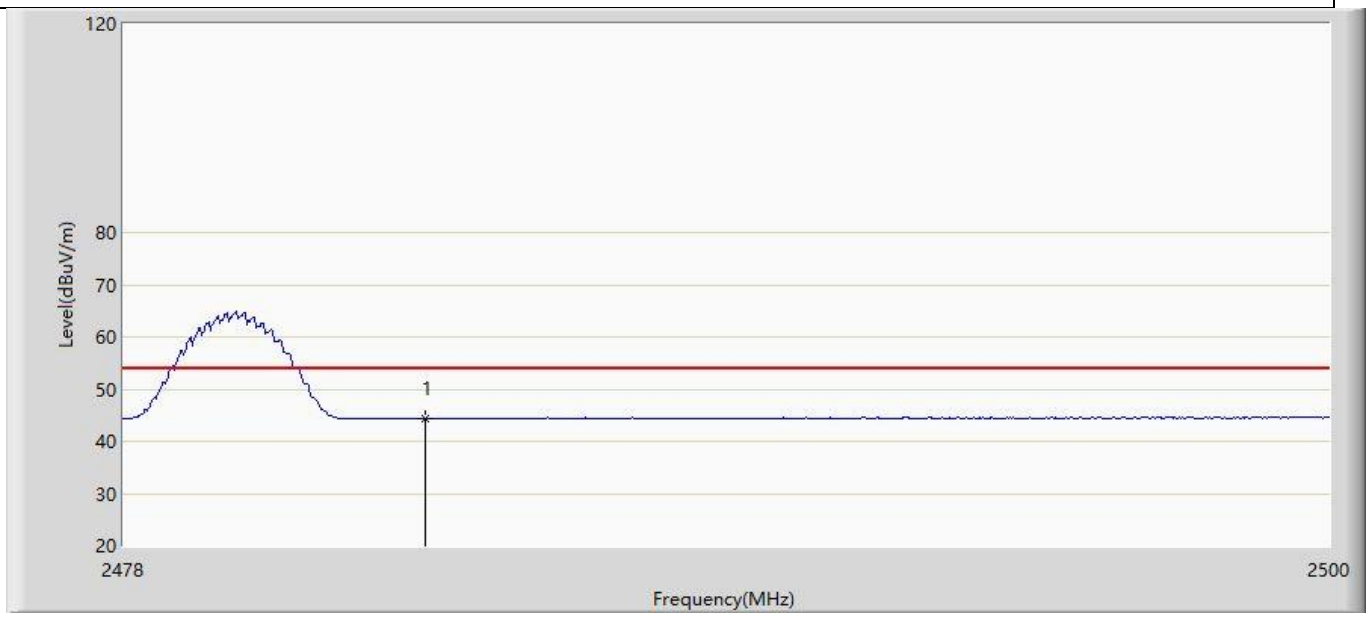
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.895	13.753	-9.105	54.000	31.141	AV

Profile: 2250118R	Page No.: 12
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:12
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2402MHz by 2DH5	



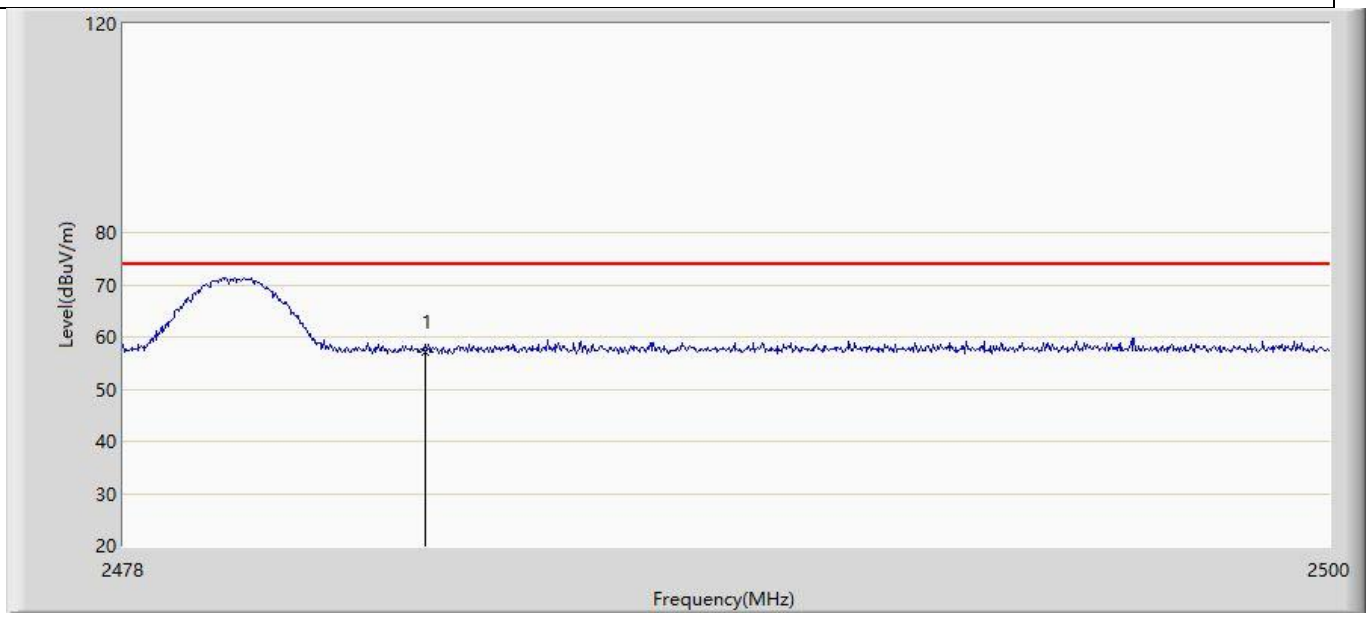
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	57.128	25.986	-16.872	74.000	31.141	PK

Profile: 2250118R	Page No.: 13
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:14
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2480MHz by 2DH5	



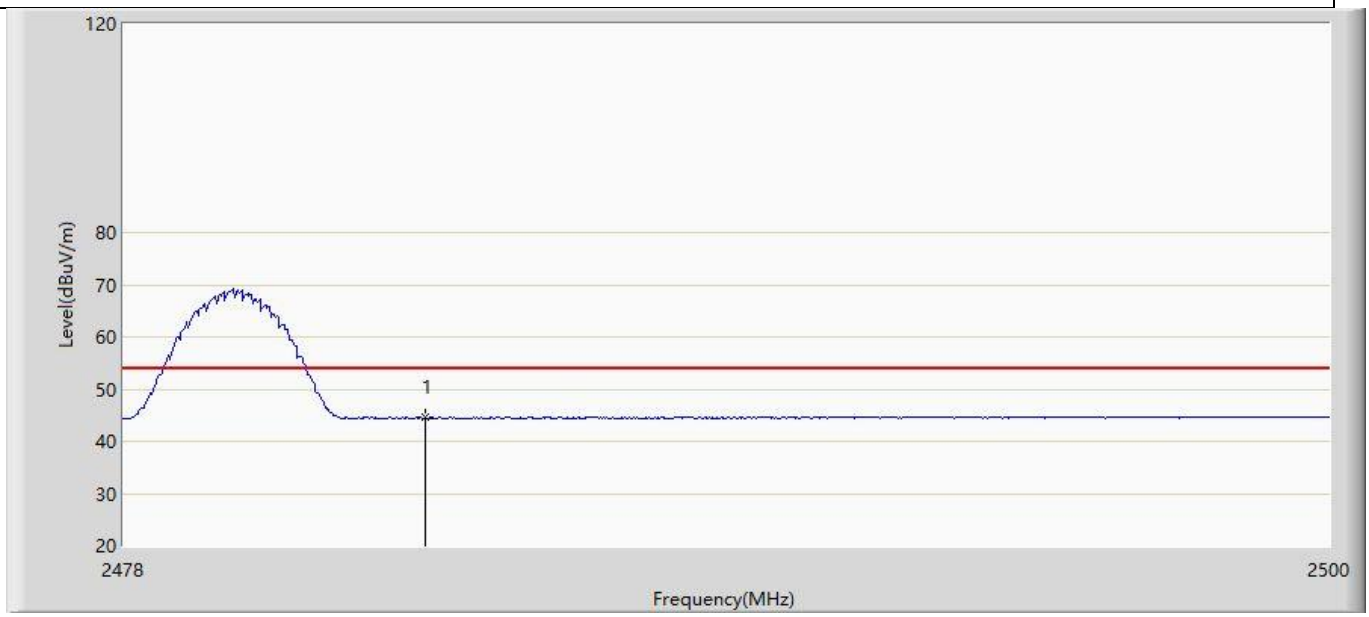
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.382	12.956	-9.618	54.000	31.426	AV

Profile: 2250118R	Page No.: 14
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:16
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2480MHz by 2DH5	



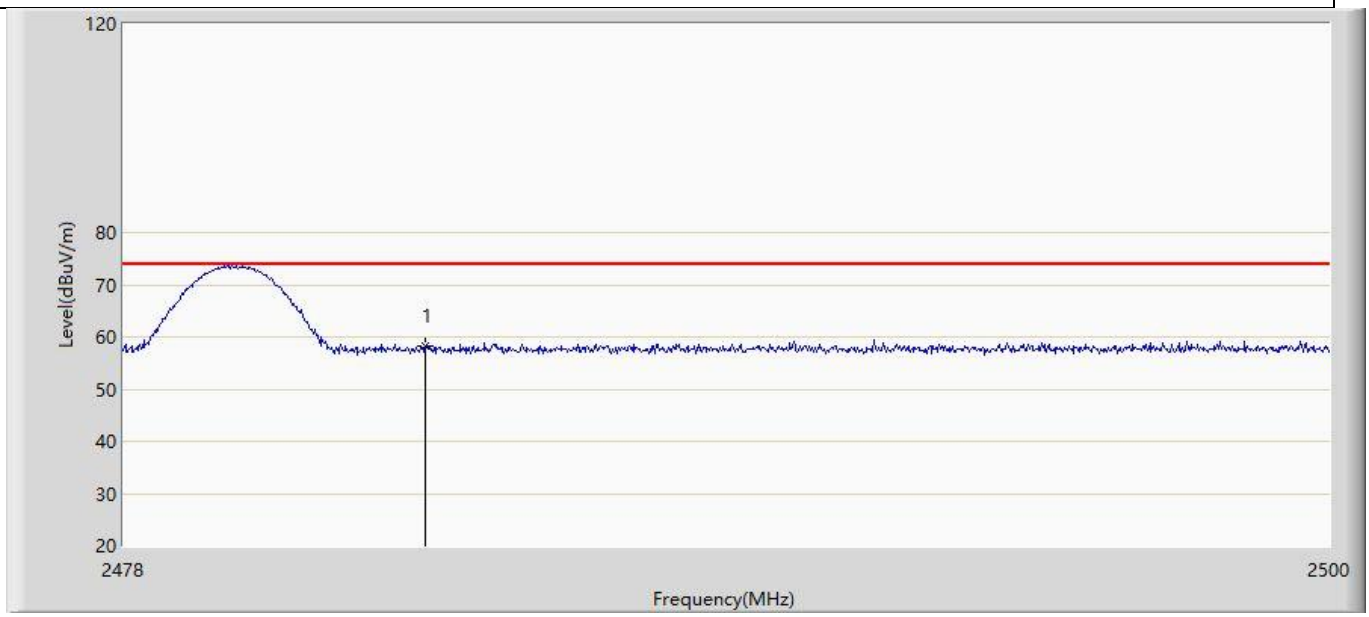
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.170	25.744	-16.830	74.000	31.426	PK

Profile: 2250118R	Page No.: 15
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:17
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2480MHz by 2DH5	



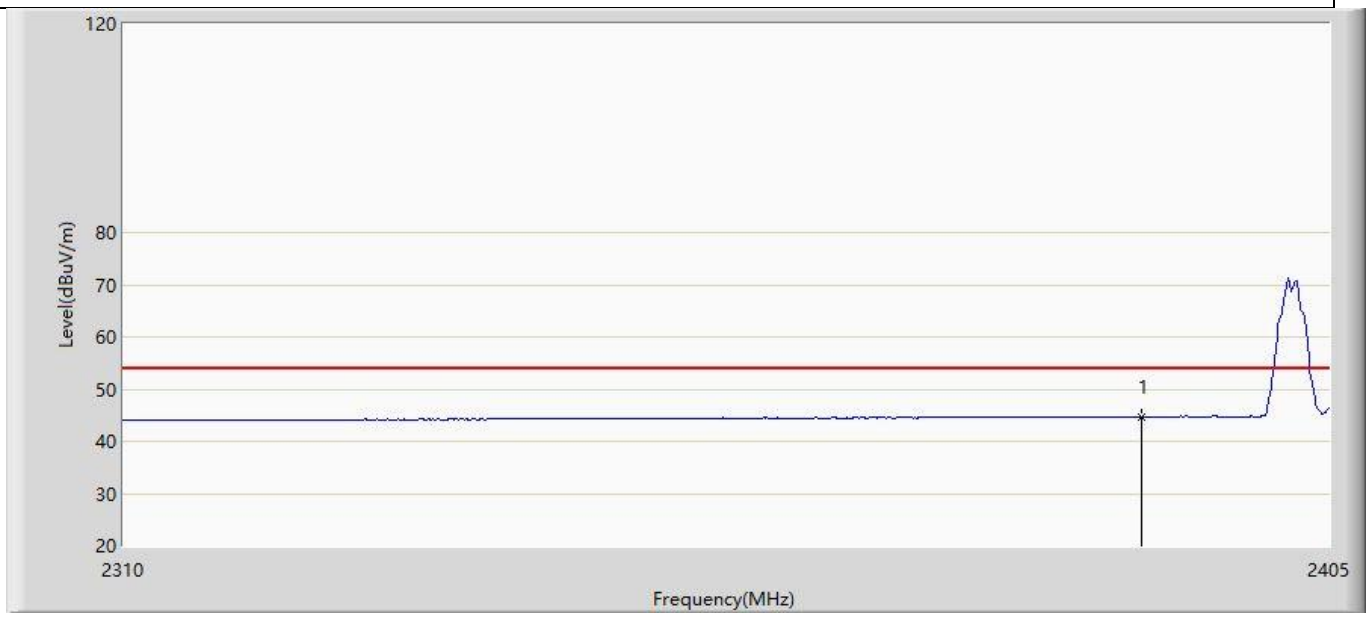
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.495	13.069	-9.505	54.000	31.426	AV

Profile: 2250118R	Page No.: 16
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:18
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 2:Transmit at 2480MHz by 2DH5	



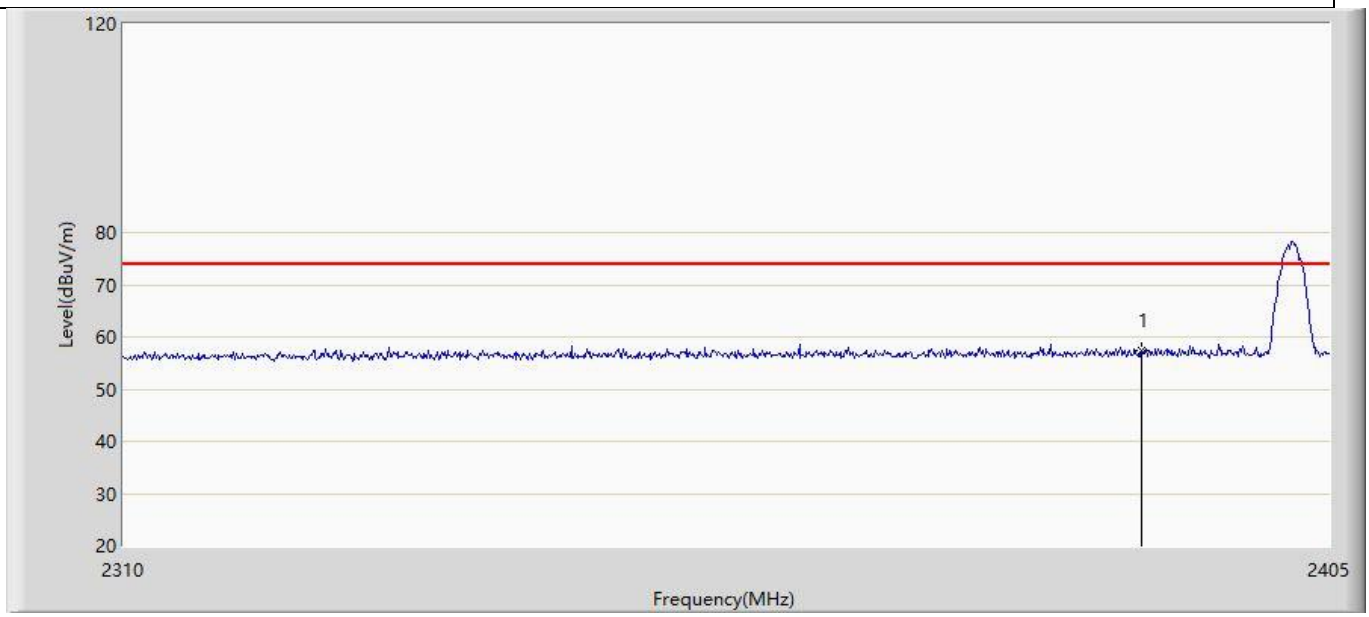
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	58.125	26.699	-15.875	74.000	31.426	PK

Profile: 2250118R	Page No.: 17
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:20
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



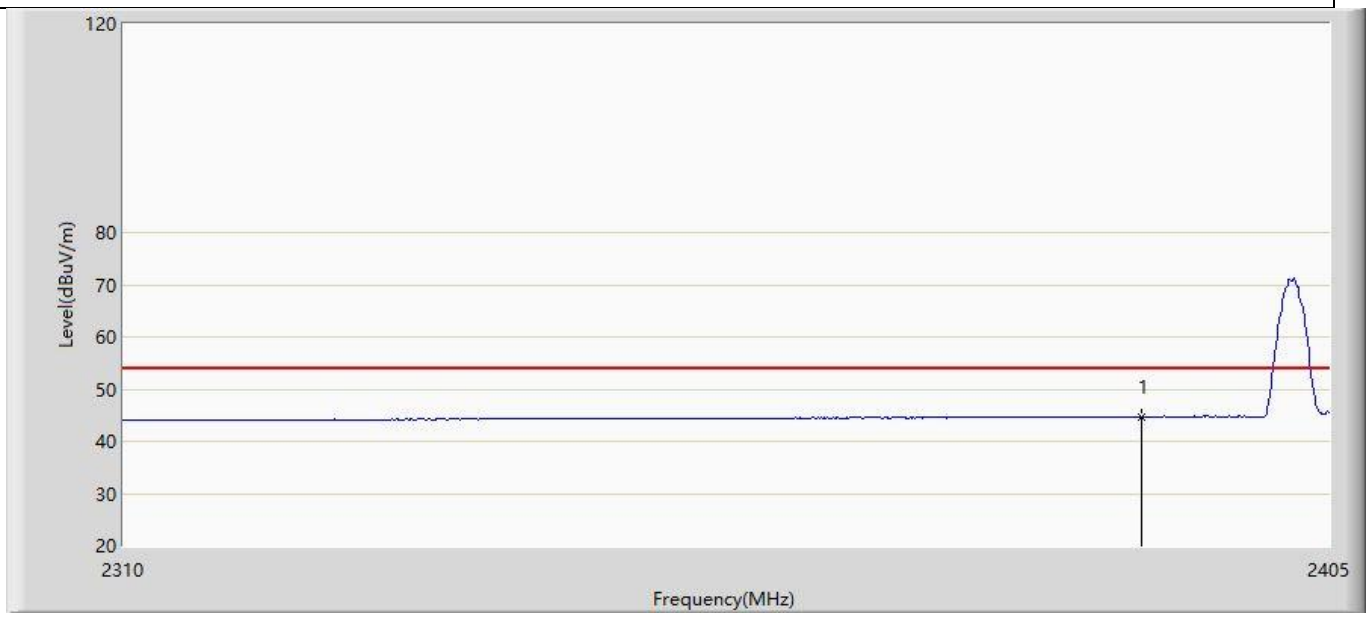
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.754	13.612	-9.246	54.000	31.141	AV

Profile: 2250118R	Page No.: 18
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:22
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



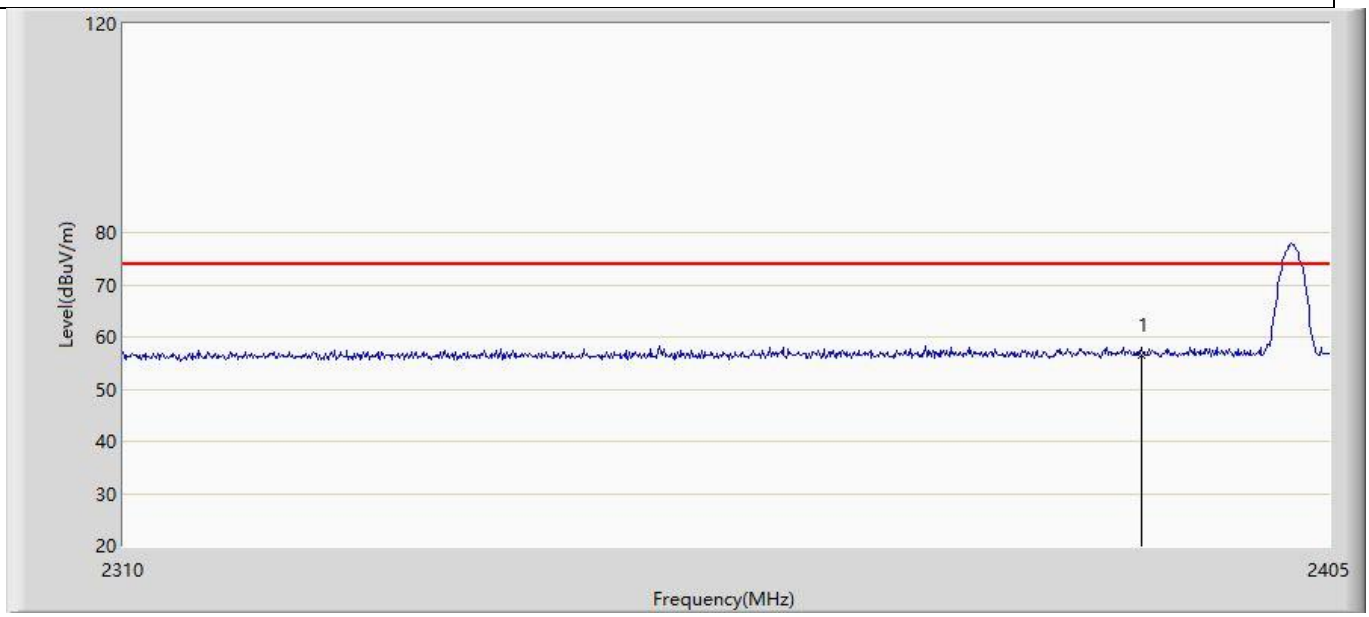
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	57.337	26.195	-16.663	74.000	31.141	PK

Profile: 2250118R	Page No.: 19
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:23
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



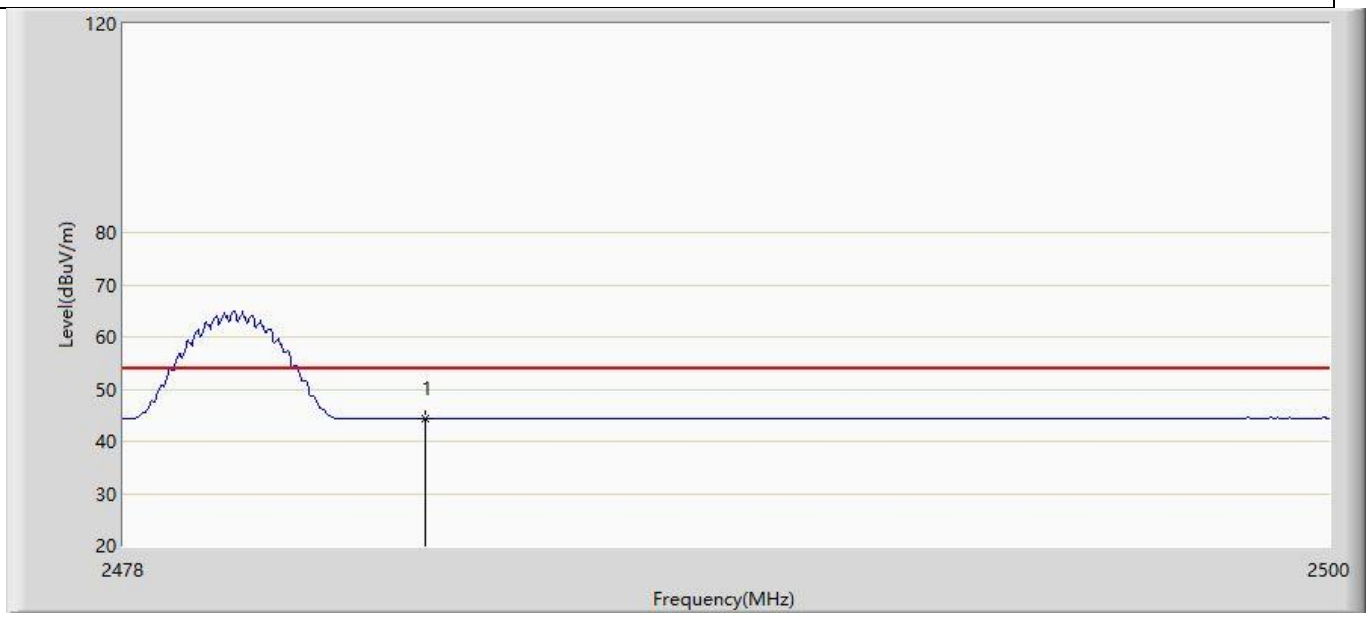
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	44.671	13.529	-9.329	54.000	31.141	AV

Profile: 2250118R	Page No.: 20
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:24
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2402MHz by 3DH5	



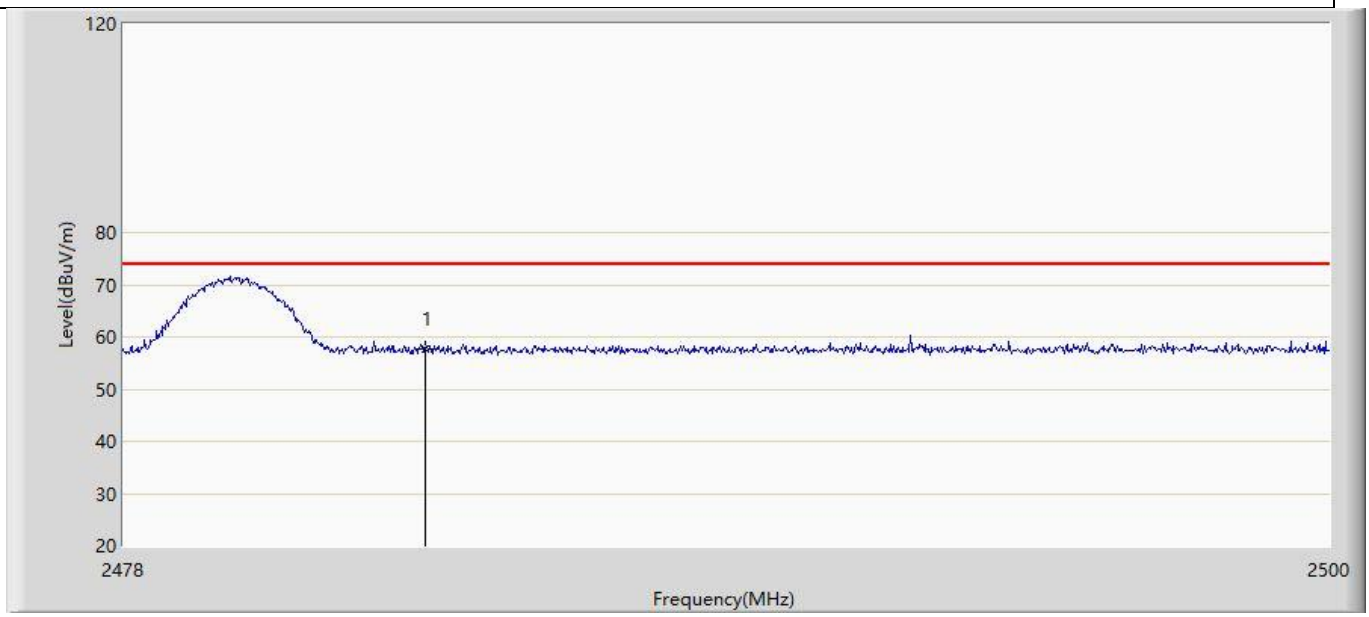
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	56.452	25.310	-17.548	74.000	31.141	PK

Profile: 2250118R	Page No.: 21
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:26
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	



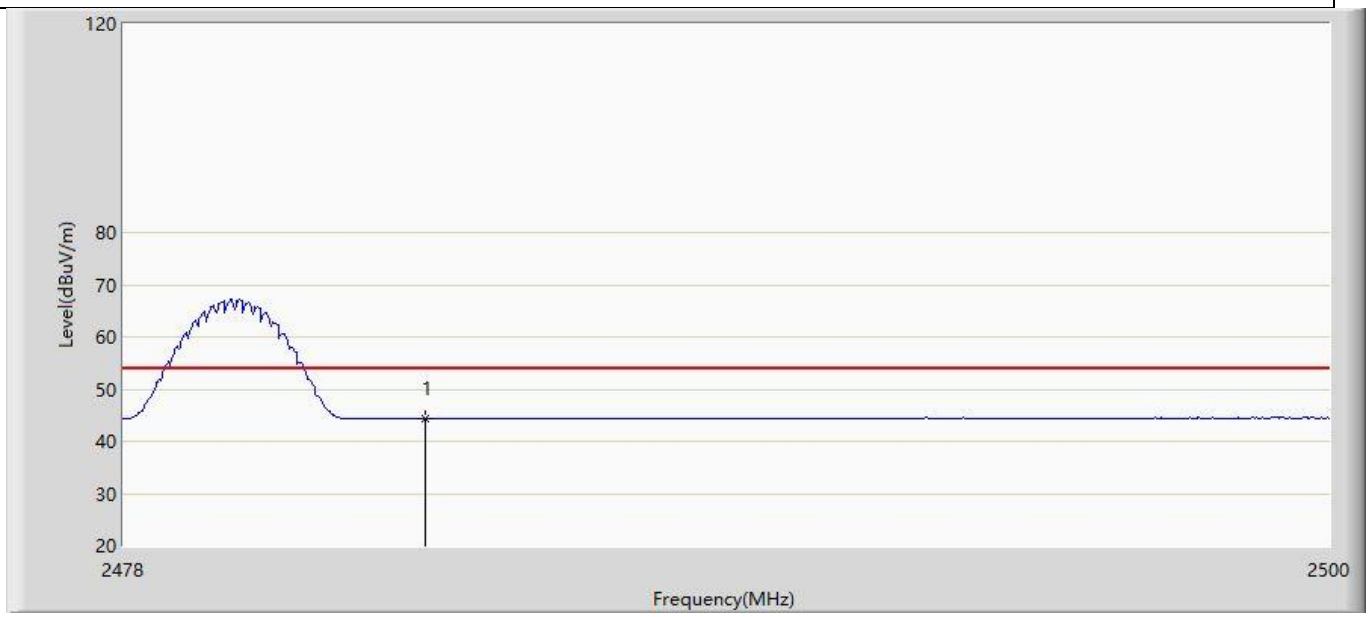
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.287	12.861	-9.713	54.000	31.426	AV

Profile: 2250118R	Page No.: 22
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:27
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Horizontal
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	



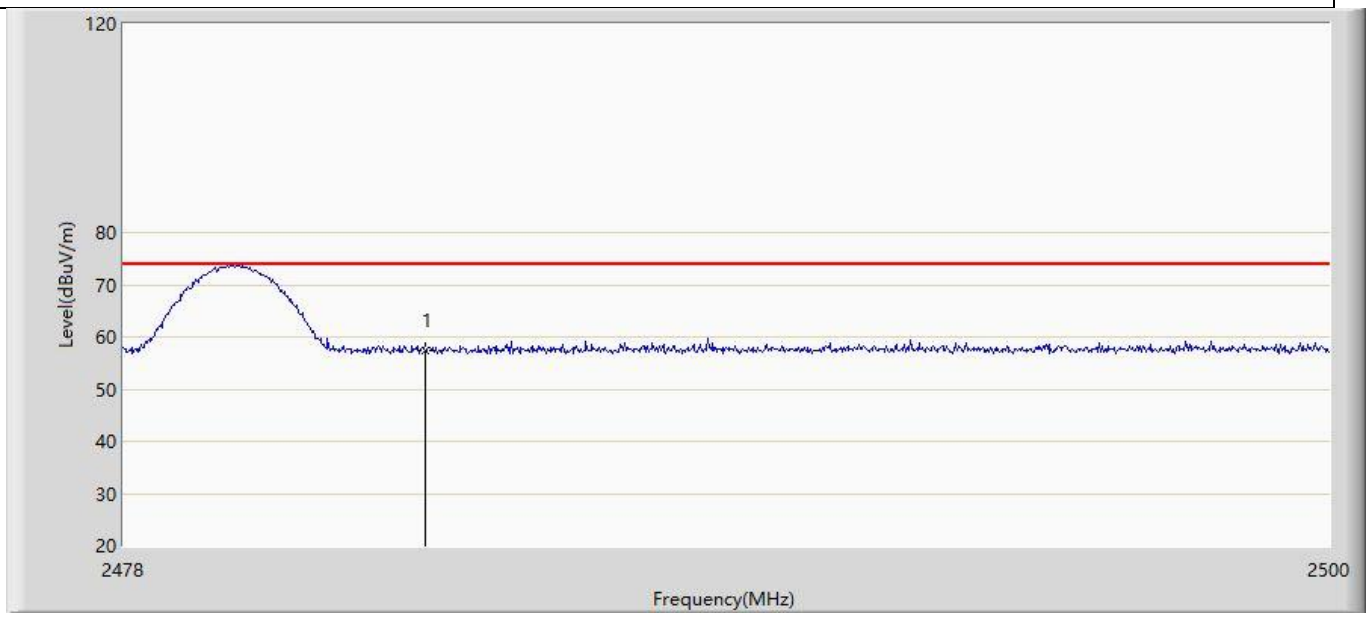
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.622	26.196	-16.378	74.000	31.426	PK

Profile: 2250118R	Page No.: 23
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:28
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.278	12.852	-9.722	54.000	31.426	AV

Profile: 2250118R	Page No.: 24
Engineer: Pengchengyang	
Site: AC5	Time: 2021/12/14 - 22:30
Limit: FCC-15.209	Margin: 0
Probe: FCC_ANT-1-18G	Polarity: Vertical
EUT: RADIO ASM-AM/FM STEREO& AUDIO DISC PLYR	Power: DC12V
Note: Mode 3:Transmit at 2480MHz by 3DH5	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.351	25.925	-16.649	74.000	31.426	PK

4.11 Antenna Requirement	VERDICT: PASS

4.11.1 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.	

4.11.2 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