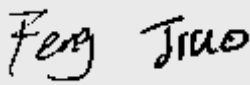
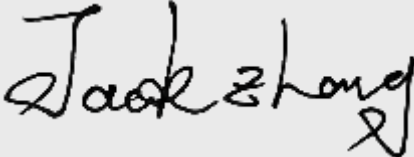


Test report No:
22A0568R-RF-US-P06V03

FCC& ISED TEST REPORT

Product Name	SC2021
Trademark	Sepura
Model and /or type reference	SC2021
FCC ID	XX6SC2021M
IC	8739A-SC2021M
Applicant's name / address	Sepura Limited 9000 Cambridge Research Park, Beach Drive, Waterbeach, Cambridge CB25 9TL, UK
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart C Section 15.247 ANSI C63.10: 2013 KDB 558074 D01v05r02 RSS-Gen Issue 5 /RSS-247 Issue 2
Verdict Summary	IN COMPLIANCE
Tested By (name / position & signature)	Feng Jiao/ Project Manager 
Approved by (name / position & signature)	Jack Zhang/ Manager 
Date of issue	2023-04-03
Report Version	V1.0
Report template No	Template_FCC Part 15C-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)	Nov. 08, 2022
Date (start test)	Nov. 09, 2022
Date (finish test)	Nov. 25, 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
22A0568R-RF-US-P06V03	V1.0	Initial issue of report.	2023-04-03

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247, RSS-Gen Issue 5, RSS-247 Issue 2.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, it is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Antenna Informaion;
 - Chapter 1.3 Test Data Rate;
 - Chapter 1.4 Channel List;
 - Chapter 1.5 Test Matrix.

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	100573	2022.09.17	2023.09.16
Two-Line V-Network	R&S	ENV216	101044	2022.03.12	2023.03.11
Current Probe	R&S	EZ-17	100678	2021.12.31	2022.12.30
50ohm Termination	SHX	TF2	07081403	2022.09.04	2023.09.03
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2022.07.07	2023.07.06
Temperature/Humidity Meter	RTS	RTS-8S	TR1-TH	2022.07.07	2023.07.06
Coaxial Cable	Suhner	RG 223	TR1-C2	2022.03.21	2023.03.20
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
EXA Spectrum Analyzer	Agilent	N9020A	MY49100159	2022.09.18	2023.09.17
MXA Signal Analyzer	Keysight	N9020A	MY56060147	2022.07.14	2023.07.13
4TX MIMO Power Sensor	Keysight	X8750A	MY59400102	2022.03.16	2023.03.15
Coaxial Cable	Woken	N/A	N/A	2022.01.18	2023.01.17
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2022.07.07	2023.07.06
Temperature/Humidity Meter	RTS	RTS-8S	RF08	2022.07.07	2023.07.06
Tonscend test software	Tonscend				

Radiated Emission(30MHz-1GHz) / AC3

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2022.09.17	2023.09.16
Loop Antenna	R&S	HFH2-Z2	833799/003	2022.04.15	2023.04.14
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2021.12.03	2022.12.02
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2022.07.09	2023.07.08
Temperature/Humidity Meter	RTS	RTS-8S	AC3-TH	2022.07.09	2023.07.08
Coaxial Cable	Huber+Suhner	RG 214	AC3-C	2022.03.30	2023.03.29
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	2022.08.12	2023.08.11
Pre-Amplifier	SKET	LNPA_0118G-45	SK2021090101	2021.12.13	2022.12.12
Preamplifier	CHENGYI	EMC184045SE	980263	2022.05.21	2023.05.20
DRG Horn	ETS-Lindgren	3117	00123988	2022.11.01	2023.10.31
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2022.05.19	2023.05.18
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
Temperature/Humidity Meter	RTS	RTS-8S	AC5-TH	2022.07.07	2023.07.06
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2022.03.21	2023.03.20
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2022.03.21	2023.03.20
Dekra test software	Dekra	-	-	-	-

UNCERTAINTY

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

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

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name	SC2021
Model No.	SC2021
FCC ID.....	XX6SC2021M
IC.....	8739A-SC2021M
Hardware Version	Pre-production
Software Version.....	1807 009 07367
Manufacturer.....	Sepura Limited
Manufacturer Address	9000 Cambridge Research Park, Beach Drive, Waterbeach, Cambridge CB25 9TL, UK
Factory	Plexus (Oradea) Manufacturing Solutions
Factory Address.....	Strada Eugeniu Carada, nr. 2 – 4, Oradea, Bihor
Model difference	The SC2021 is a TETRA portable radio in the SC20 series of radios, operating in the VHF band, with operating frequencies 136-174 MHz. The SC20 is a TETRA hand-portable radio with a class 3 high power RF transmission, providing 2 Watts of audio and IP 66, 67 and 68 ratings. The SC20 has a range of options including Bluetooth, Wi-Fi and GNSS functionality. All these functions are controlled by licence.

Wireless specification.....	WLAN
Operating frequency range(s).....	2400~2483.5MHz
Type of modulation.....	802.11b: DSSS-DBPSK, DQPSK, CCK 802.11g/n: OFDM-BPSK, QPSK, 16QAM, 64QAM
Number of channel.....	802.11b/g/n(20MHz) : 11
Device category	☐ Fixed point-to-point
	☐ Emit multiple directional beams, simultaneously or sequentially
	☒ Other cases

Rated power supply	Voltage and Frequency	
	☐	AC: 220 – 240 V, 50/60 Hz
	☐	DC: 7.4V
	☒	Adapter: INPUT : 100~240V 50/60Hz 0.55A OUTPUT:10V----2400mA
	☐	Battery:.....
Brand of adapter	SWITCHIGN POWER SUPPLY	
Adapter model.....	ABSP024100240-1	
Mounting position	☐	Table top equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☒	Hold-mounted equipment
	☐	Other: Module

1.2 Antenna Information

Antenna model / type number.....:	N/A		
Antenna serial number	N/A		
Antenna Delivery	☒	1TX + 1RX	
	☐	2TX + 2RX	
	☐	Others:.....	
Antenna technology.....:	☒	SISO	
	☐	MIMO	☐ CDD
			☐ Beam-forming
Antenna Type.....:	☐	External	☐ Dipole
			☐ Sectorized
			☐ PCB
	☒	Internal	☐ FPC
			☒ PCB
			☐ Metal Monopole Antenna
			☐ Ceramic chip
			☐ Others.....
Antenna Gain.....:	2.5dBi		

1.3 Test Data Rate

IEEE 802.11b

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

IEEE 802.11g

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

IEEE 802.11n

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)	
				20MHz	
				800ns GI	400ns GI
1	0	BPSK	1/2	6.5	7.2
1	1	QPSK	1/2	13.0	14.4
1	2	QPSK	3/4	19.5	21.7
1	3	16-QAM	1/2	26.0	28.9
1	4	16-QAM	3/4	39.0	43.3
1	5	64-QAM	2/3	52.0	57.8
1	6	64-QAM	3/4	58.5	65.0
1	7	64-QAM	5/6	65.0	72.2

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

Symbol	Explanation
R	Code rate
GI	guard interval

Note: The data rate marks blue are the worst.

1.4 Channel List

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

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

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

1.5 Test Matrix

Test item	Model / Type		
	1PR002226GK58ED	1PR002226GK58DN	1PR002226GK58E3
DTS Bandwidth	☒	☐	☐
Maximum conducted output power	☒	☐	☐
Maximum power spectral density	☒	☐	☐
Band edge measurements	☐	☒	☐
Conducted Spurious Emission	☒	☐	☐
Duty cycle	☒	☐	☐
Emissions in Restricted Bands	☐	☒	☐
AC Power Line Conducted Emission	☐	☒	☐
Antenna Requirement	☐	☒	☐

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)

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

2.2 Accessories Information

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

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

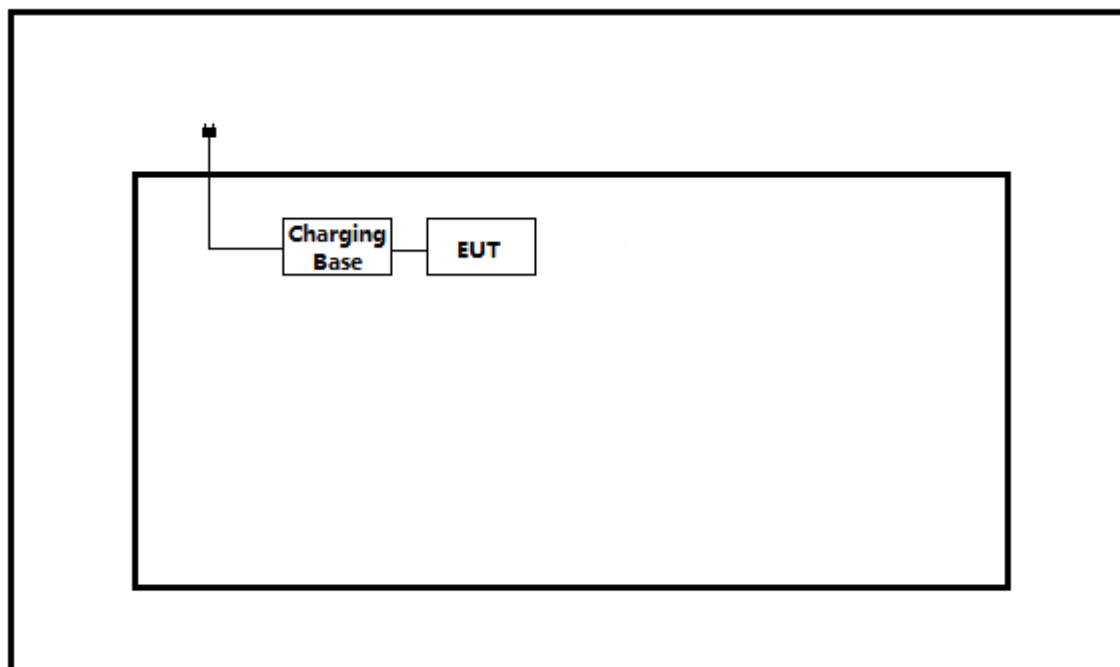
The EUT has been tested with the following auxiliary equipment / unit / software:

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

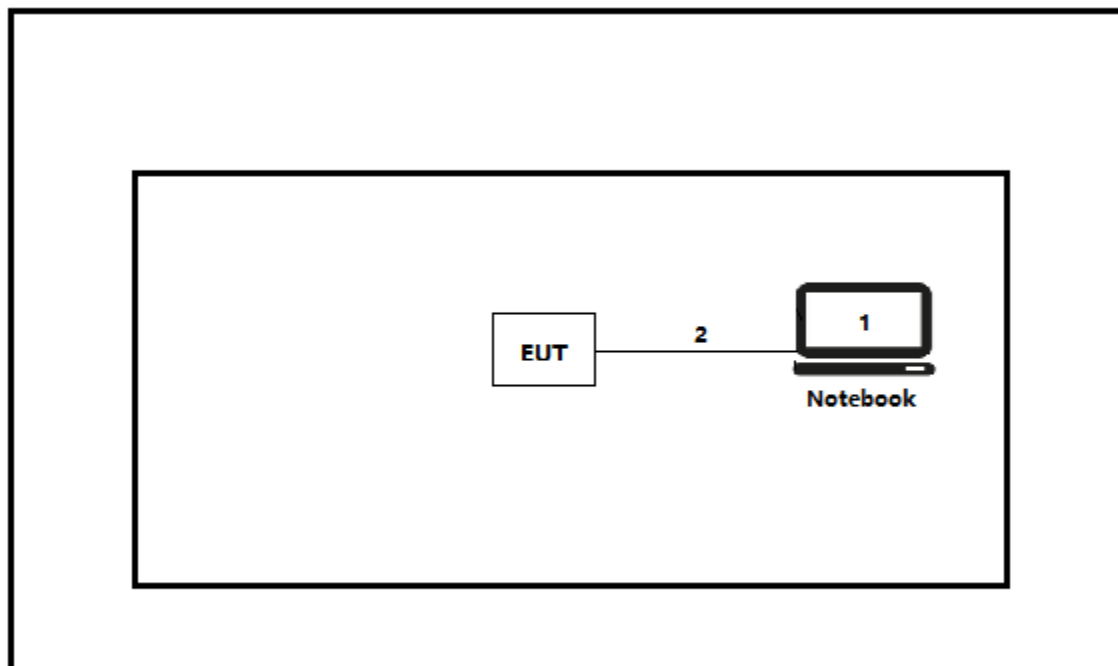
2.4 Test Configuration / Block diagram used for tests

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

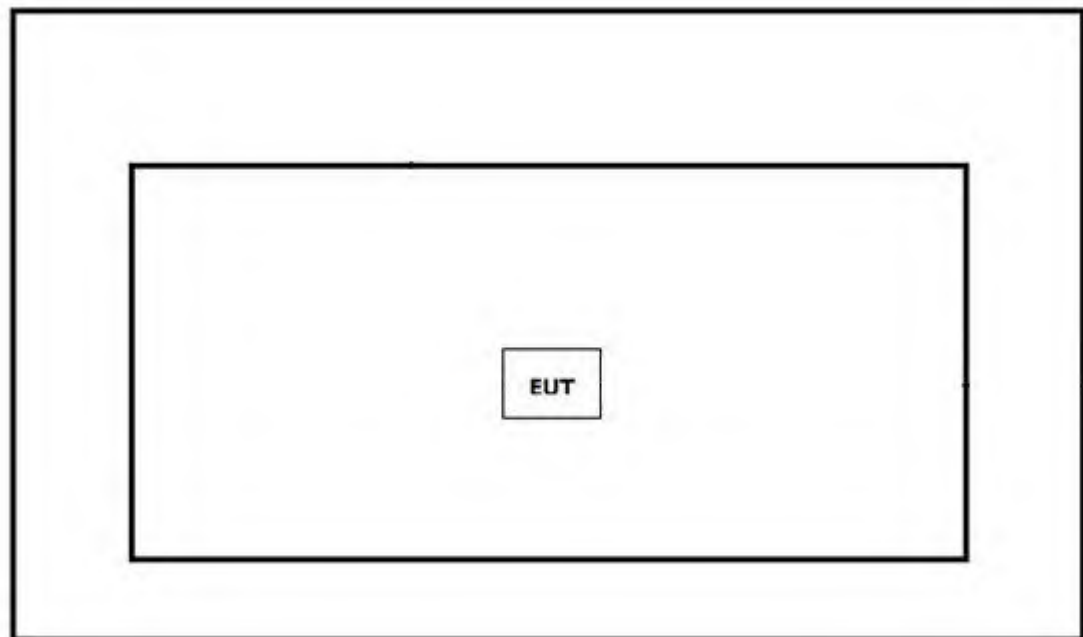
Test setup Diagram- AC Line Conducted Emission Test



Test setup Diagram- Conducted test



Test setup Diagram- Radiated test



2.5 Testing process

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

3 VERDICT SUMMARY SECTION

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

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 15 Subpart C Section 15.247	2020	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz.
ANSI C63.10	2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
KDB 558074 D01V05r02	2019	Guidance for performing compliance measurements on Digital Transmission System (DTS) operating under section 15.247
RSS-Gen Issue 5 Amendment 2	2021	General Requirements 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 Overview of results

For FCC

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

For ISED

Requirement – Test case	Basic standard(s)	Verdict	Remark
AC Power Line Conducted Emission	RSS-Gen Issue 5 Section 8.8	PASS	---
Emissions in restricted frequency bands	RSS-Gen Issue 5 Section 8.9	PASS	---
Duty cycle	ANSI C63.10:2013	PASS	---
Emissions in non-restricted frequency bands	RSS-247 Issue 2 Section 5.5	PASS	---
Band Edge	RSS-Gen Issue 5 Section 8.10	PASS	---
Fundamental emission output power	RSS-247 Issue 2 Section 5.4(d)	PASS	---
DTS Bandwidth	RSS-Gen Issue 5 Section 6.7	PASS	---
Power Spectral Density	RSS-247 Issue 2 Section 5.2(b)	PASS	---
Antenna Requirement	RSS-Gen Issue 5 Section 6.8	PASS	---

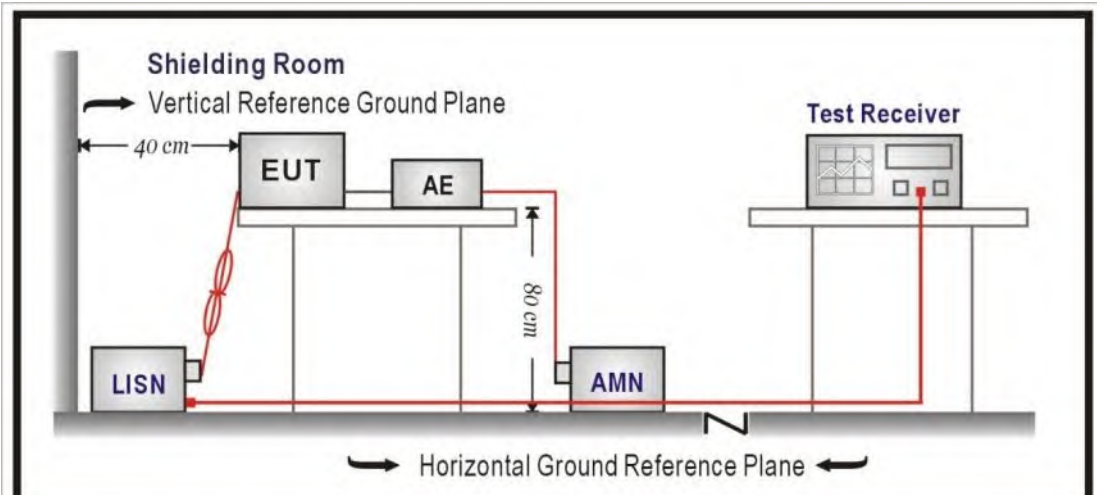
3.3 Test Facility

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

4 TEST RESULTS

4.1 AC Power Line Conducted Emission	VERDICT: PASS
---	----------------------

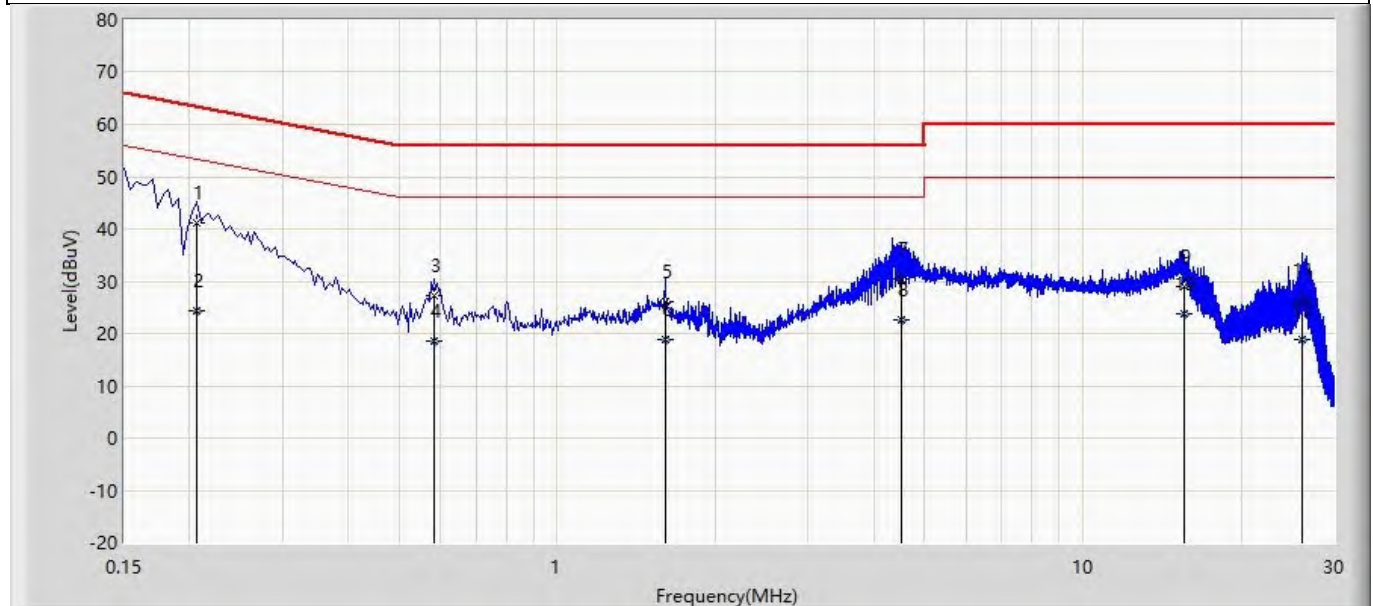
4.1.1 Limit		
Standard	FCC Part 15 Subpart C Paragraph 15.207	
Frequency range [MHz]	Limit: QP [dB(μV) ¹⁾]	Limit: AV [dB(μV) ¹⁾]
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾
0,50 - 5,0	56	46
5,0 - 30	60	50
¹⁾ At the transition frequency, the lower limit applies. ²⁾ The limit decreases linearly with the logarithm of the frequency.		

4.1.2 Test Setup


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

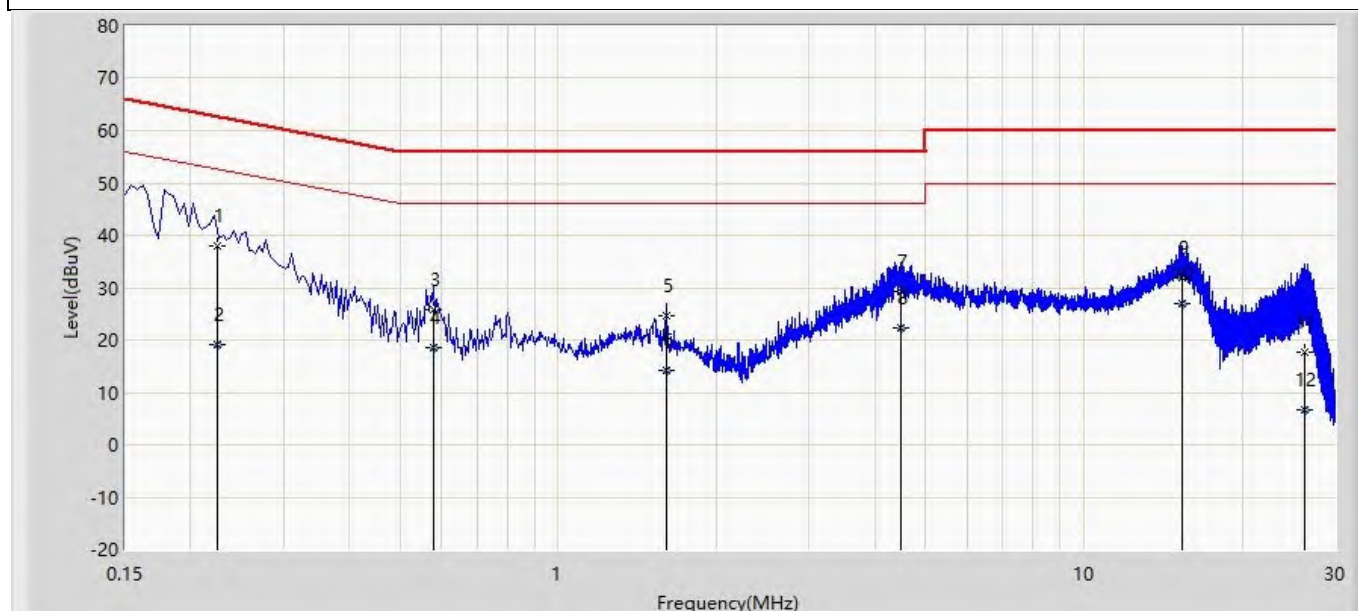
4.1.4 Test Data

Profile: 22A0568R	Page No.: 101
Engineer: Yu Liu	
Site: TR1	Time: 2022/11/21 - 21:04
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Neutral
EUT: SC2021	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1	*	0.206	41.085	31.507	-22.298	63.383	9.577	QP
2		0.206	24.428	14.851	-28.955	53.383	9.577	AV
3		0.582	27.136	17.504	-28.864	56.000	9.632	QP
4		0.582	18.687	9.055	-27.313	46.000	9.632	AV
5		1.606	26.058	16.388	-29.942	56.000	9.670	QP
6		1.606	18.709	9.039	-27.291	46.000	9.670	AV
7		4.526	30.535	20.751	-25.465	56.000	9.783	QP
8		4.526	22.631	12.848	-23.369	46.000	9.783	AV
9		15.606	29.061	18.897	-30.939	60.000	10.164	QP
10		15.606	23.773	13.609	-26.227	50.000	10.164	AV
11		26.070	26.351	15.915	-33.649	60.000	10.435	QP
12		26.070	18.715	8.280	-31.285	50.000	10.435	AV

Profile: 22A0568R	Page No.: 102
Engineer: Yu Liu	
Site: TR1	Time: 2022/11/21 - 21:09
Limit: FCC_Part15.207_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101190(0.009-30MHz)	Polarity: Line
EUT: SC2021	Power: AC 120V/60Hz
Note: Mode 1:Transmit at 2412MHz by 802.11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.225	37.987	28.397	-24.638	62.625	9.590	QP
2		0.225	19.273	9.683	-33.352	52.625	9.590	AV
3		0.578	25.676	16.040	-30.324	56.000	9.636	QP
4		0.578	18.450	8.814	-27.550	46.000	9.636	AV
5		1.606	24.612	14.942	-31.388	56.000	9.670	QP
6		1.606	14.156	4.486	-31.844	46.000	9.670	AV
7		4.482	29.397	19.602	-26.603	56.000	9.794	QP
8		4.482	22.443	12.648	-23.557	46.000	9.794	AV
9		15.406	31.916	21.779	-28.084	60.000	10.136	QP
10	*	15.406	26.853	16.716	-23.147	50.000	10.136	AV
11		26.342	17.785	7.398	-42.215	60.000	10.387	QP
12		26.342	6.694	-3.693	-43.306	50.000	10.387	AV

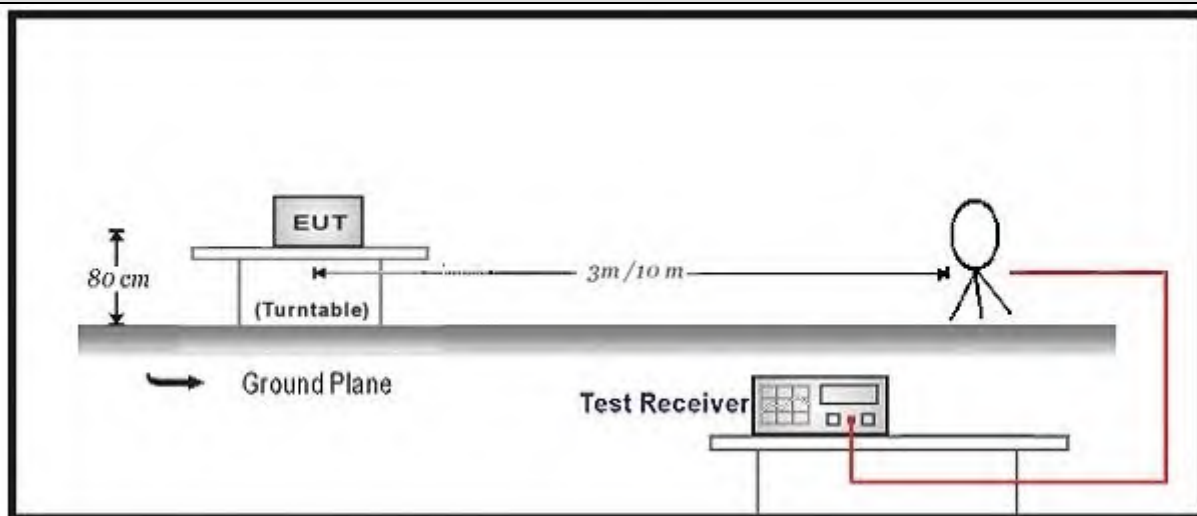
4.2 Emissions in restricted frequency bands**VERDICT: PASS****4.2.1 Limit**

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 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			

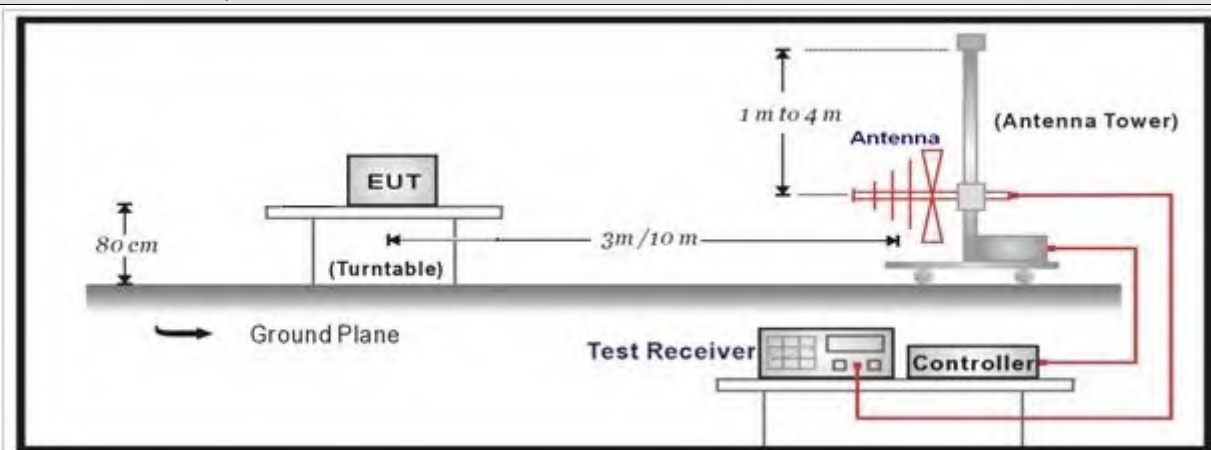
that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements;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

4.2.2 Test Setup

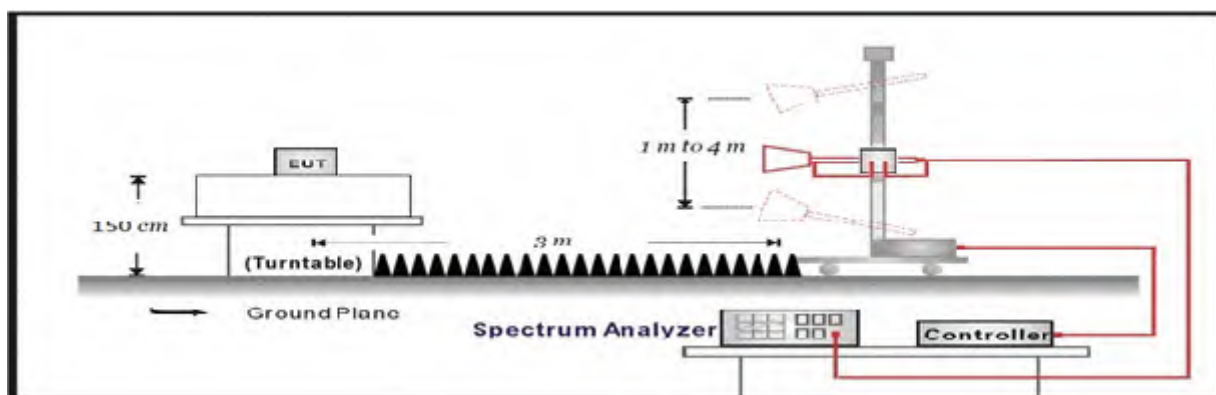
Below 30MHz Test Setup:



30MHz-1GHz Test Setup:



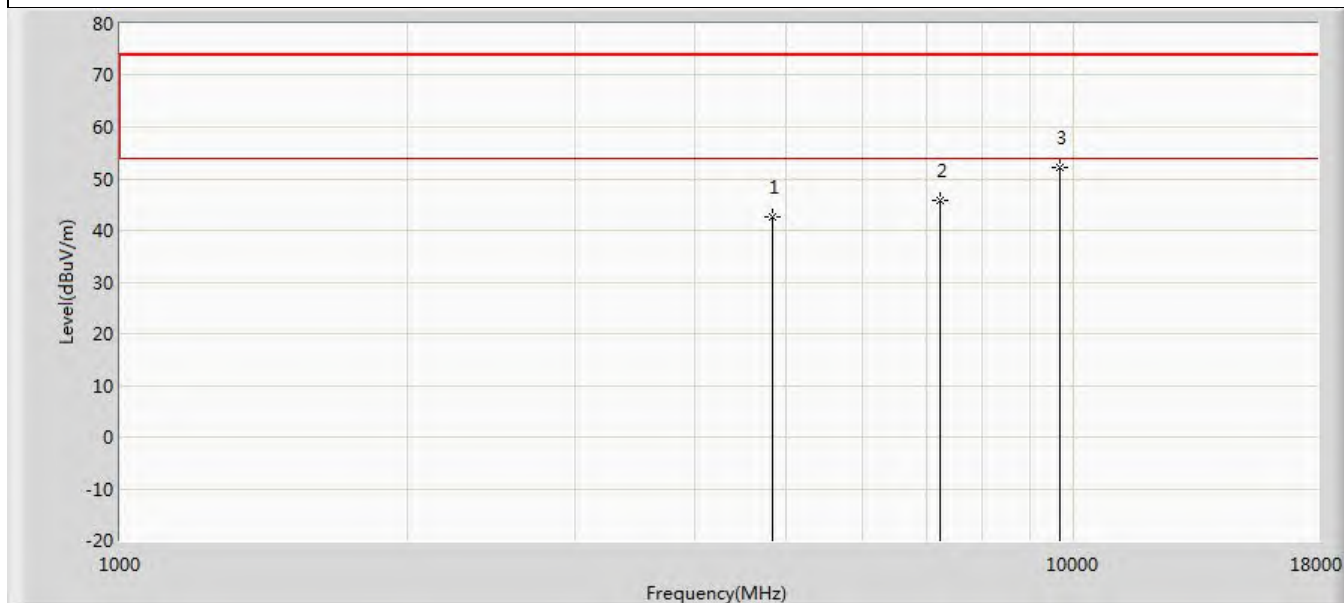
Above 1GHz Test Setup:



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

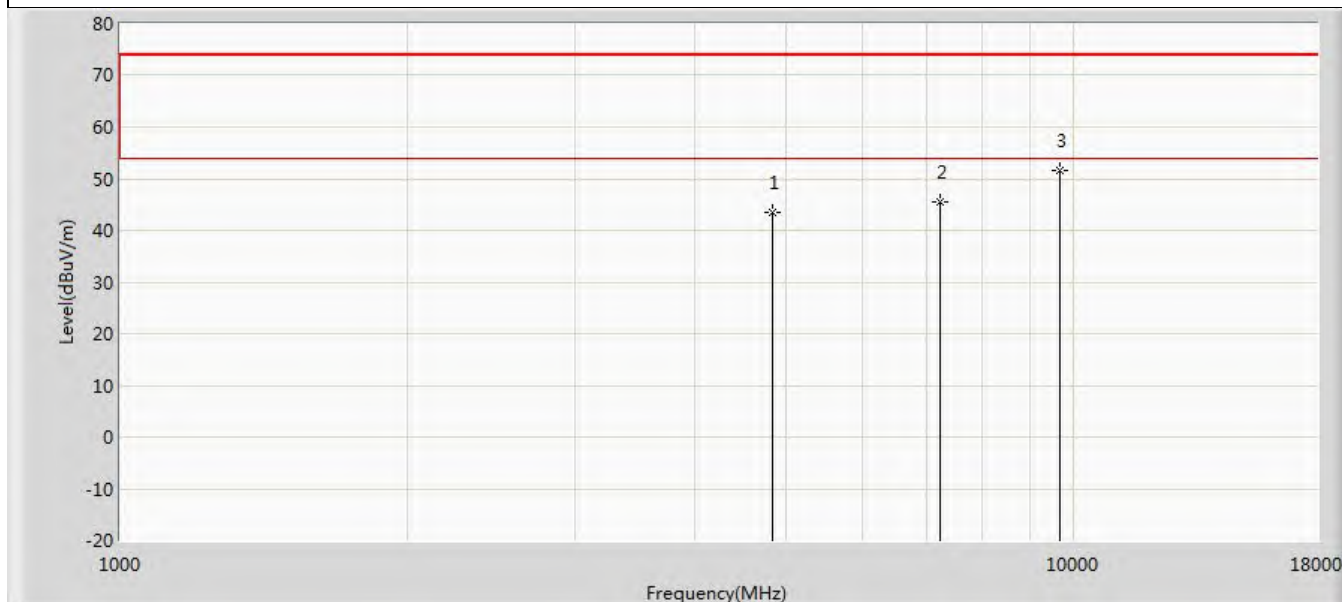
4.2.4 Test Data

Profile: 22A0568R	Page No.: 43
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1:Transmit at 2412MHz by 11b	



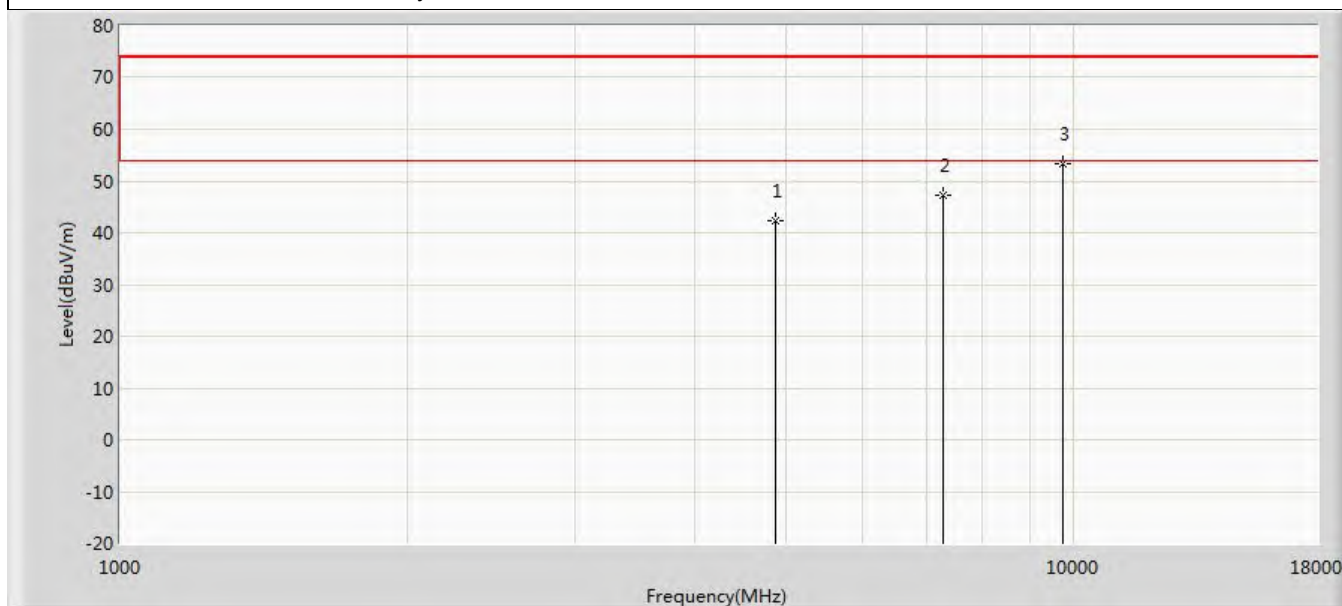
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	42.574	57.466	-31.426	74.000	-14.892	PK
2		7236.000	45.828	56.672	-28.172	74.000	-10.844	PK
3	*	9653.000	52.133	59.968	-21.867	74.000	-7.835	PK

Profile: 22A0568R	Page No.: 44
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11b	



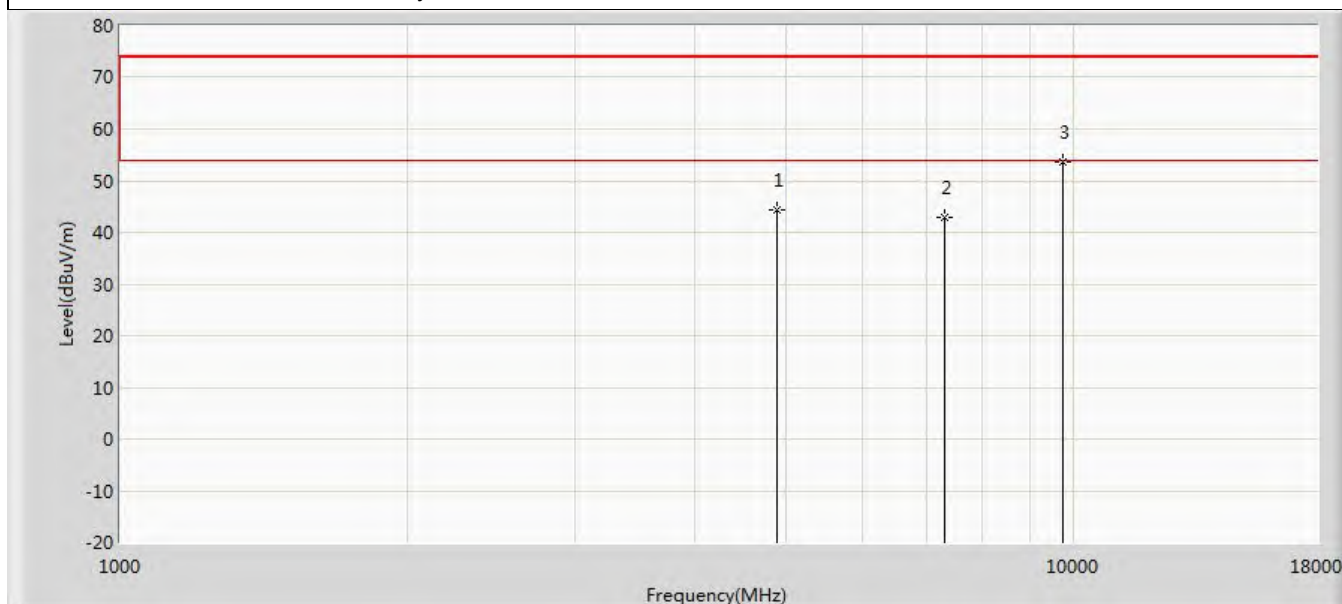
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4825.000	43.386	58.272	-30.614	74.000	-14.886	PK
2		7239.000	45.432	56.256	-28.568	74.000	-10.824	PK
3	*	9653.000	51.654	59.489	-22.346	74.000	-7.835	PK

Profile: 22A0568R	Page No.: 45
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2437MHz by 11b	



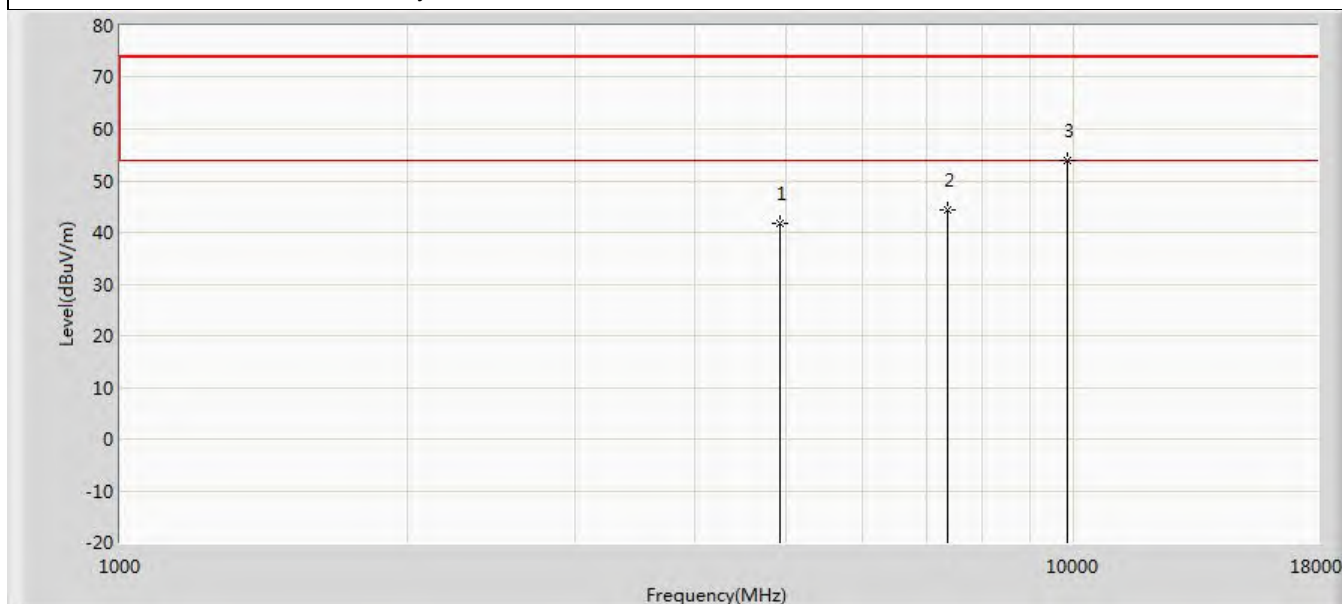
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	42.345	56.955	-31.655	74.000	-14.610	PK
2		7307.000	47.335	58.169	-26.665	74.000	-10.834	PK
3	*	9755.000	53.443	61.174	-20.557	74.000	-7.731	PK

Profile: 22A0568R	Page No.: 46
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2437MHz by 11b	



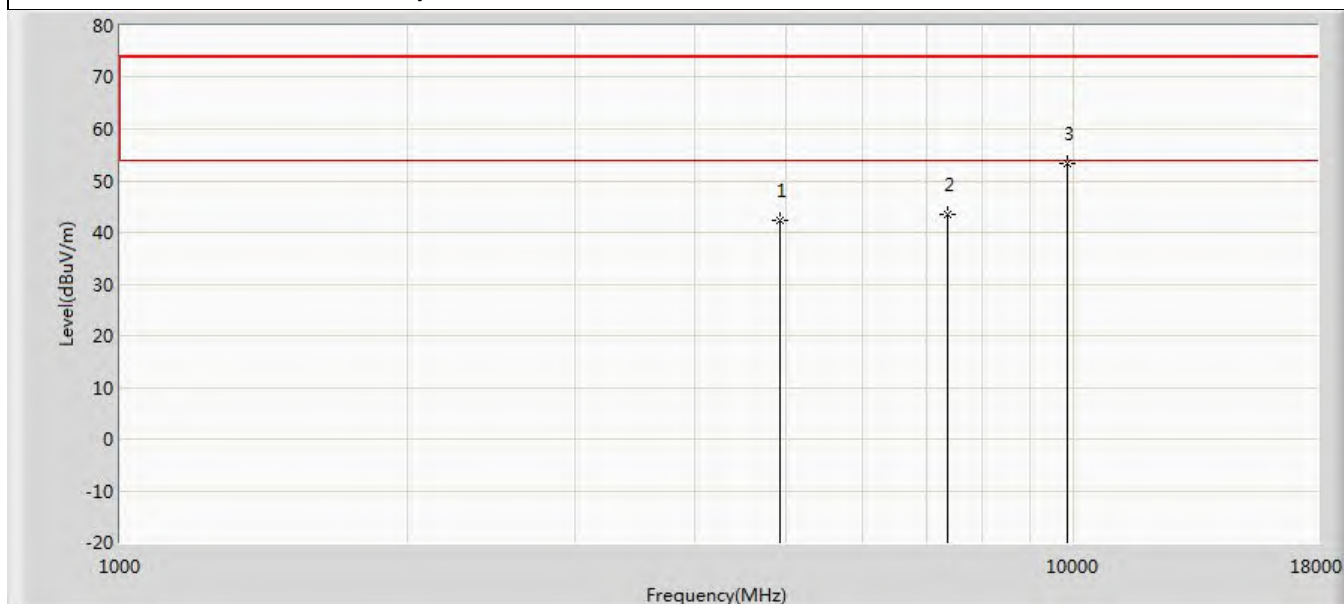
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4876.000	44.317	58.892	-29.683	74.000	-14.575	PK
2		7311.000	43.009	53.854	-30.991	74.000	-10.844	PK
3	*	9755.000	53.571	61.302	-20.429	74.000	-7.731	PK

Profile: 22A0568R	Page No.: 47
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



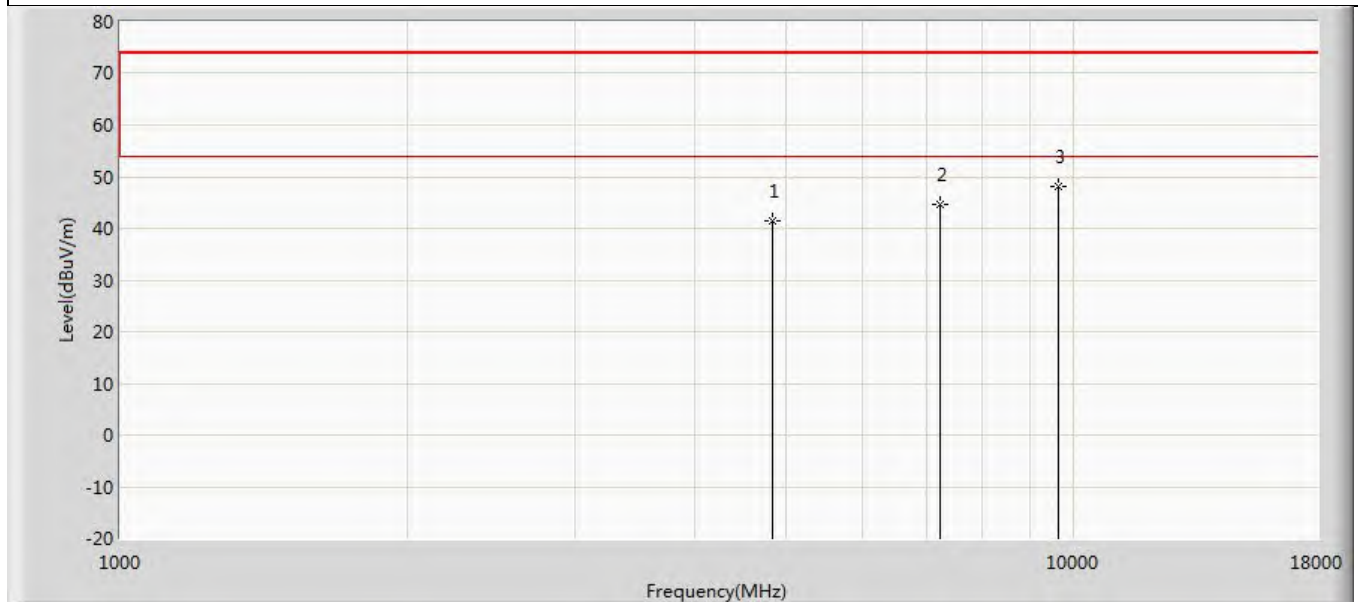
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	41.790	56.530	-32.210	74.000	-14.741	PK
2		7386.000	44.353	55.218	-29.647	74.000	-10.866	PK
3	*	9840.000	53.867	61.770	-20.133	74.000	-7.903	PK

Profile: 22A0568R	Page No.: 48
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



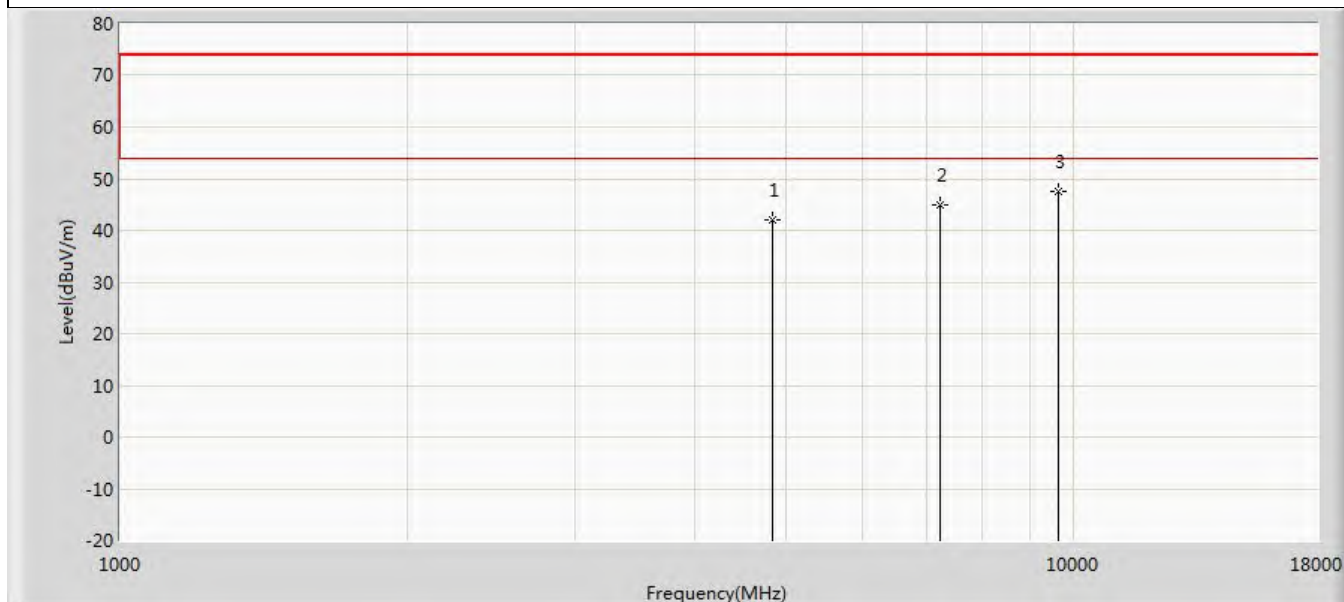
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	42.392	57.132	-31.608	74.000	-14.741	PK
2		7386.000	43.515	54.380	-30.485	74.000	-10.866	PK
3	*	9840.000	53.296	61.199	-20.704	74.000	-7.903	PK

Profile: 22A0568R	Page No.: 49
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2: Transmit at 2412MHz by 11g	



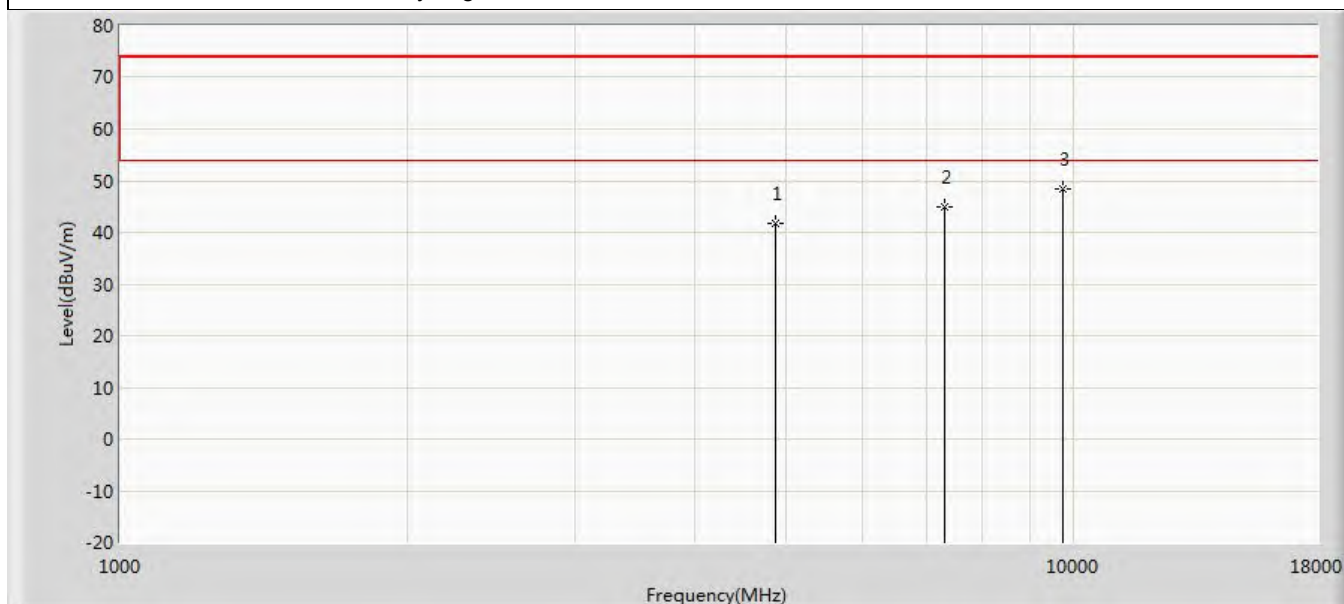
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	41.587	56.479	-32.413	74.000	-14.892	PK
2		7236.000	44.652	55.496	-29.348	74.000	-10.844	PK
3	*	9648.000	48.172	56.033	-25.828	74.000	-7.860	PK

Profile: 22A0568R	Page No.: 50
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2: Transmit at 2412MHz by 11g	



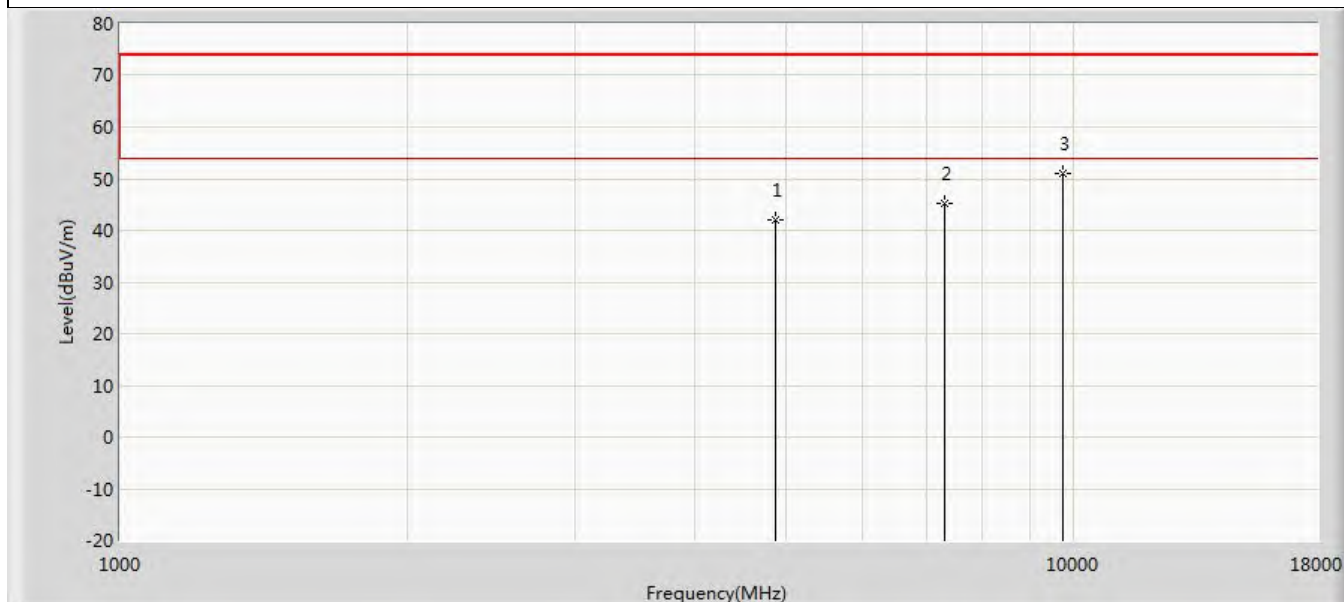
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	42.045	56.937	-31.955	74.000	-14.892	PK
2		7236.000	44.958	55.802	-29.042	74.000	-10.844	PK
3	*	9648.000	47.597	55.458	-26.403	74.000	-7.860	PK

Profile: 22A0568R	Page No.: 51
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2: Transmit at 2437MHz by 11g	



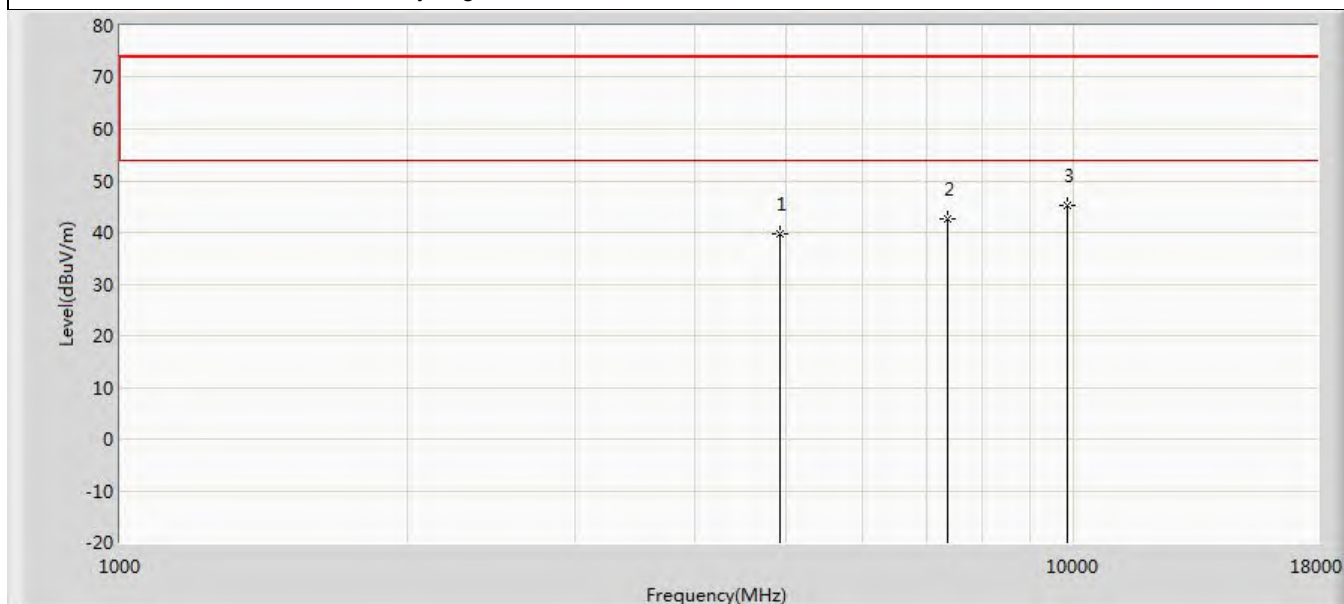
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	41.605	56.215	-32.395	74.000	-14.610	PK
2		7311.000	44.817	55.662	-29.183	74.000	-10.844	PK
3	*	9748.000	48.425	56.216	-25.575	74.000	-7.791	PK

Profile: 22A0568R	Page No.: 52
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2:Transmit at 2437MHz by 11g	



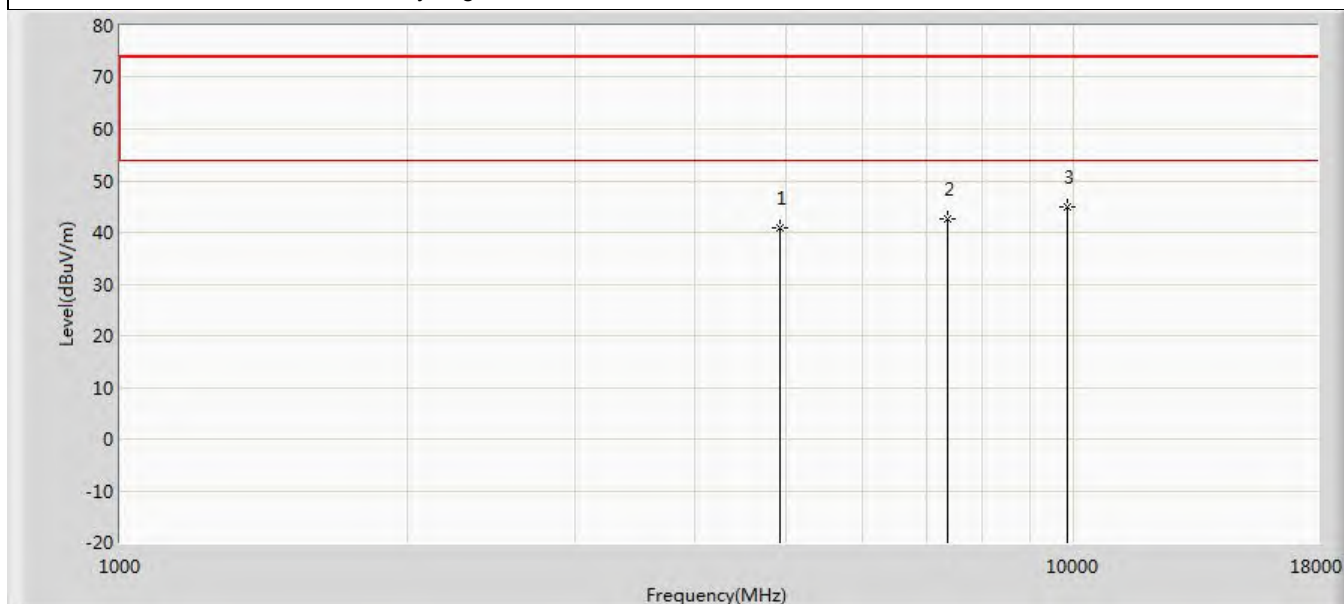
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	41.938	56.548	-32.062	74.000	-14.610	PK
2		7311.000	45.198	56.043	-28.802	74.000	-10.844	PK
3	*	9755.000	50.907	58.638	-23.093	74.000	-7.731	PK

Profile: 22A0568R	Page No.: 53
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 03:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2:Transmit at 2462MHz by 11g	



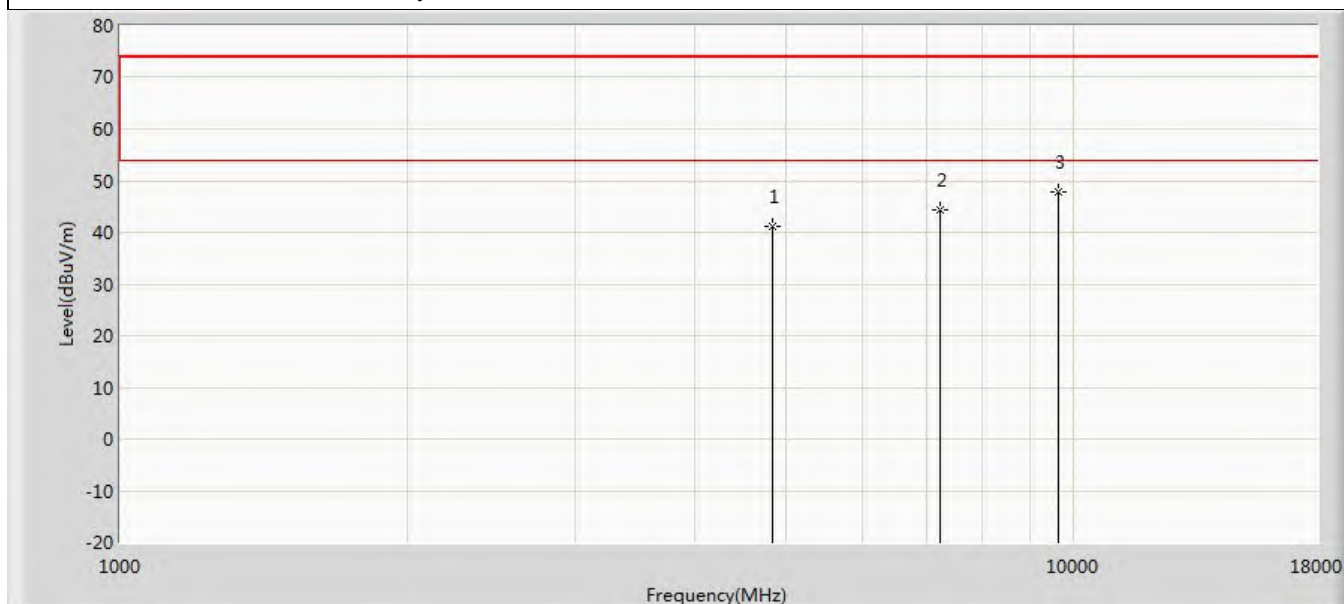
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	39.844	54.584	-34.156	74.000	-14.741	PK
2		7386.000	42.537	53.402	-31.463	74.000	-10.866	PK
3	*	9848.000	45.209	52.834	-28.791	74.000	-7.625	PK

Profile: 22A0568R	Page No.: 54
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 03:15
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode2:Transmit at 2462MHz by 11g	



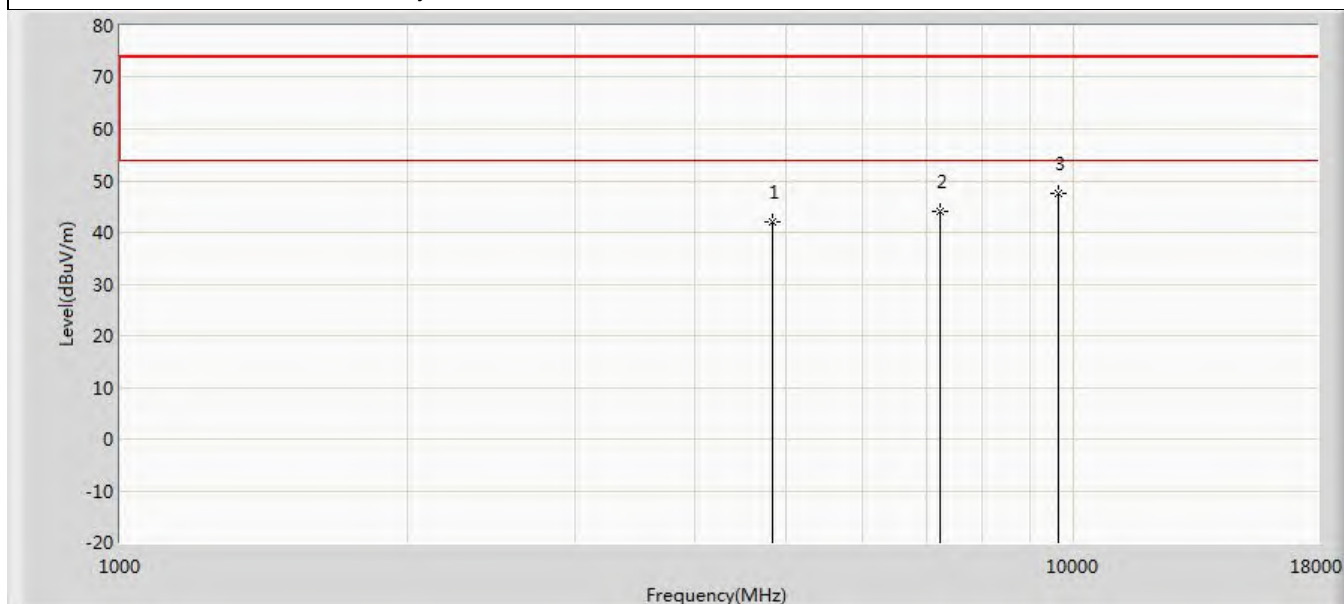
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	40.736	55.476	-33.264	74.000	-14.741	PK
2		7386.000	42.738	53.603	-31.262	74.000	-10.866	PK
3	*	9848.000	45.060	52.685	-28.940	74.000	-7.625	PK

Profile: 22A0568R	Page No.: 55
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2412MHz by 11n20	



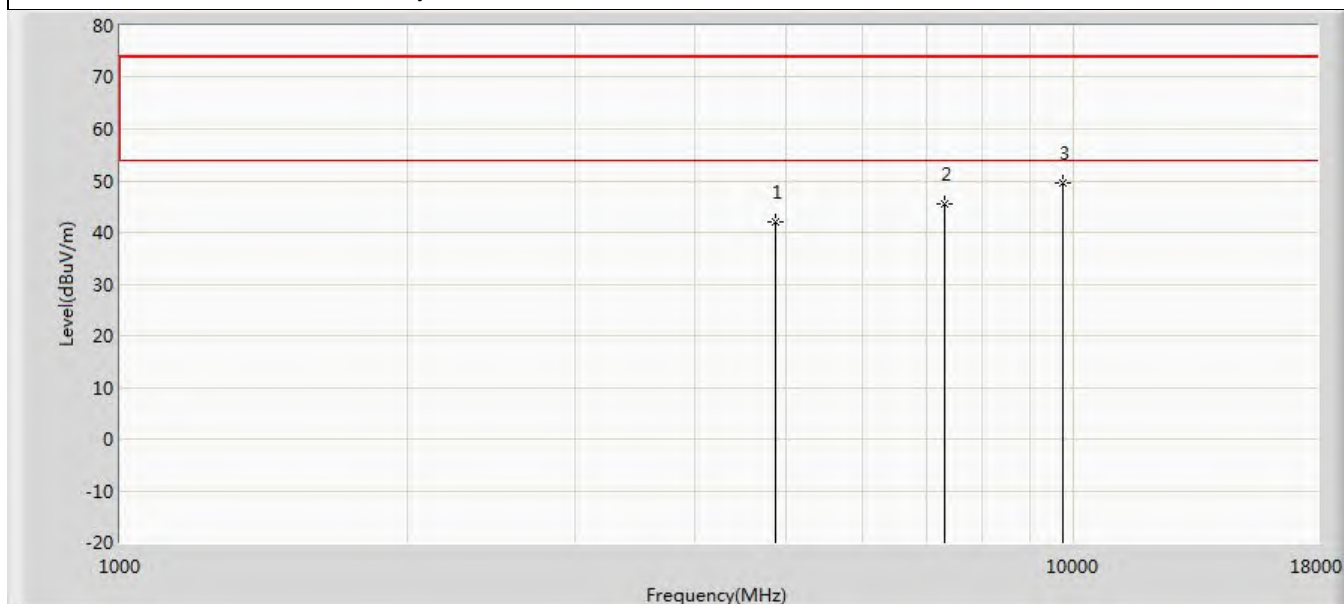
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	41.146	56.038	-32.854	74.000	-14.892	PK
2		7236.000	44.465	55.309	-29.535	74.000	-10.844	PK
3	*	9648.000	47.696	55.557	-26.304	74.000	-7.860	PK

Profile: 22A0568R	Page No.: 56
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2412MHz by 11n20	



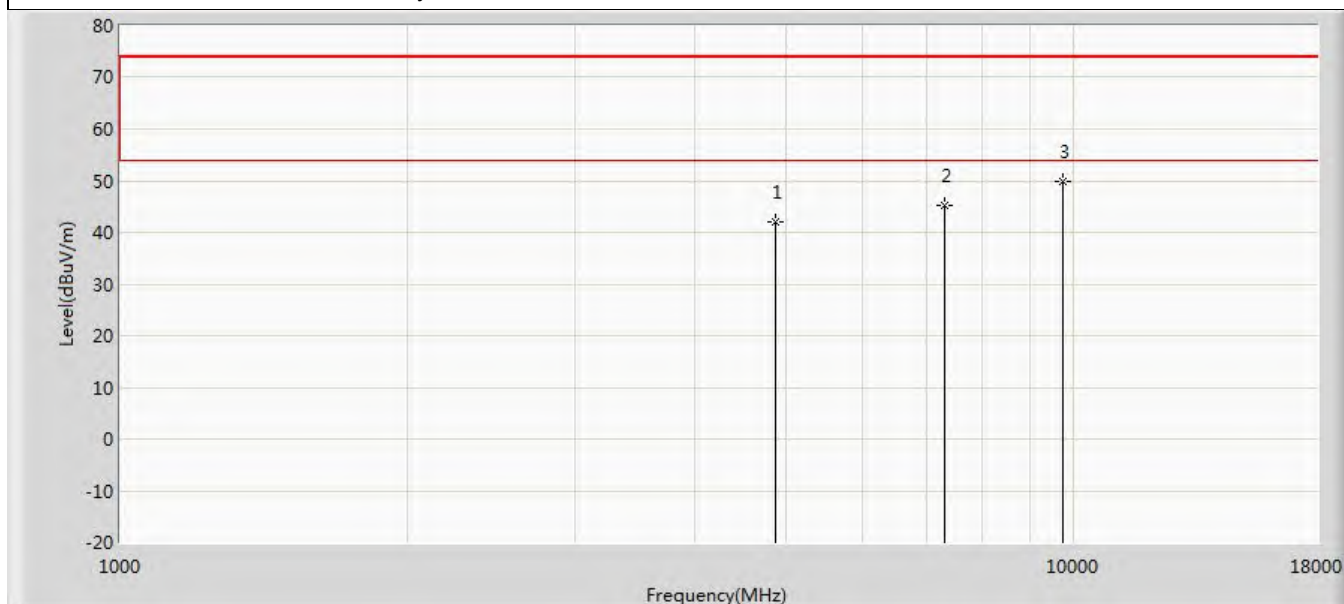
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4824.000	41.969	56.861	-32.031	74.000	-14.892	PK
2		7236.000	44.180	55.024	-29.820	74.000	-10.844	PK
3	*	9648.000	47.589	55.450	-26.411	74.000	-7.860	PK

Profile: 22A0568R	Page No.: 57
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2437MHz by 11n20	



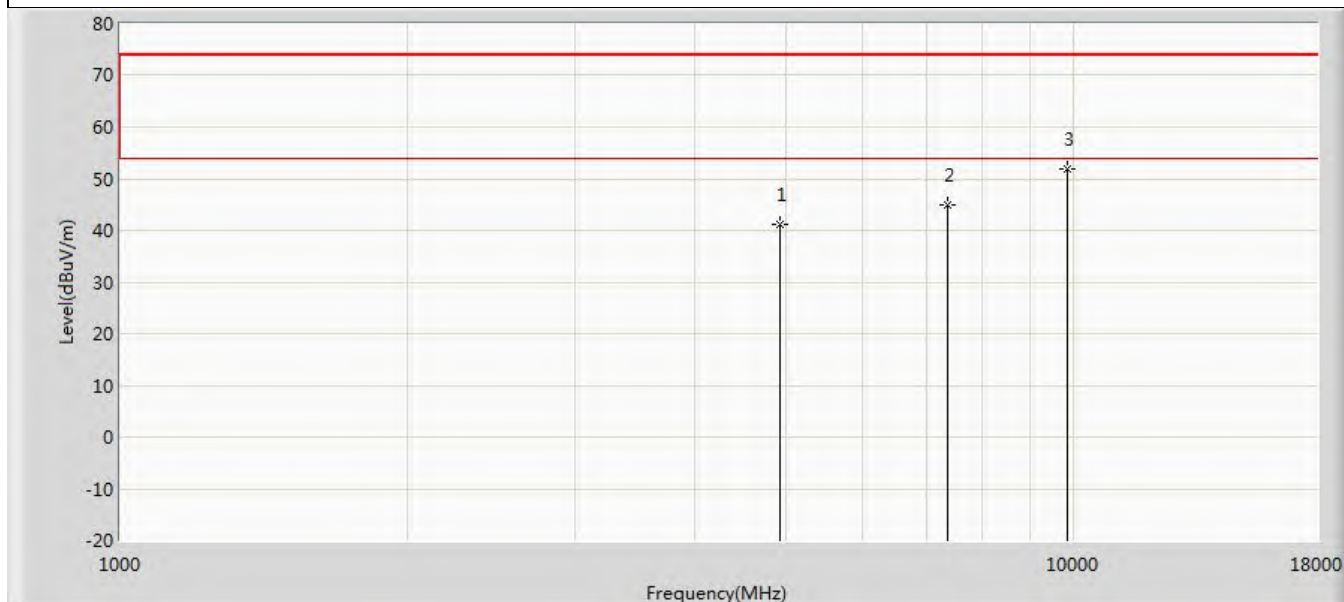
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	41.958	56.568	-32.042	74.000	-14.610	PK
2		7311.000	45.366	56.211	-28.634	74.000	-10.844	PK
3	*	9748.000	49.599	57.390	-24.401	74.000	-7.791	PK

Profile: 22A0568R	Page No.: 58
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2437MHz by 11n20	



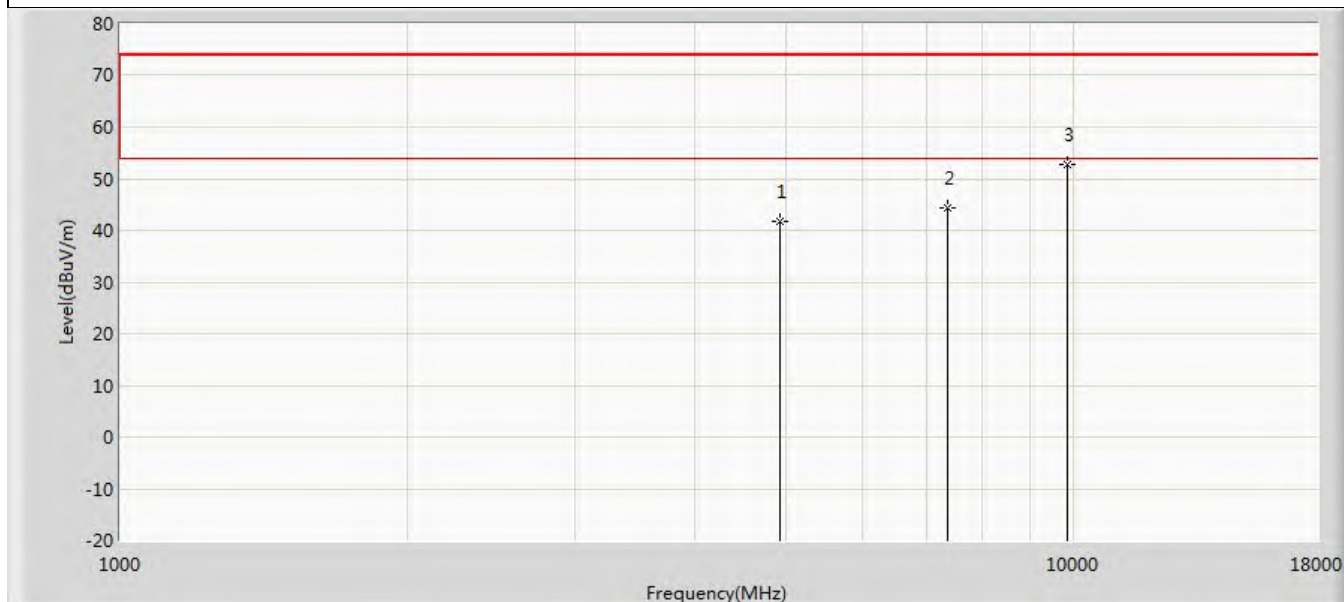
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4874.000	41.960	56.570	-32.040	74.000	-14.610	PK
2		7311.000	45.197	56.042	-28.803	74.000	-10.844	PK
3	*	9748.000	49.957	57.748	-24.043	74.000	-7.791	PK

Profile: 22A0568R	Page No.: 59
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2462MHz by 11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	41.155	55.895	-32.845	74.000	-14.741	PK
2		7386.000	44.784	55.649	-29.216	74.000	-10.866	PK
3	*	9857.000	51.801	59.113	-22.199	74.000	-7.312	PK

Profile: 22A0568R	Page No.: 60
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/21 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode3:Transmit at 2462MHz by 11n20	



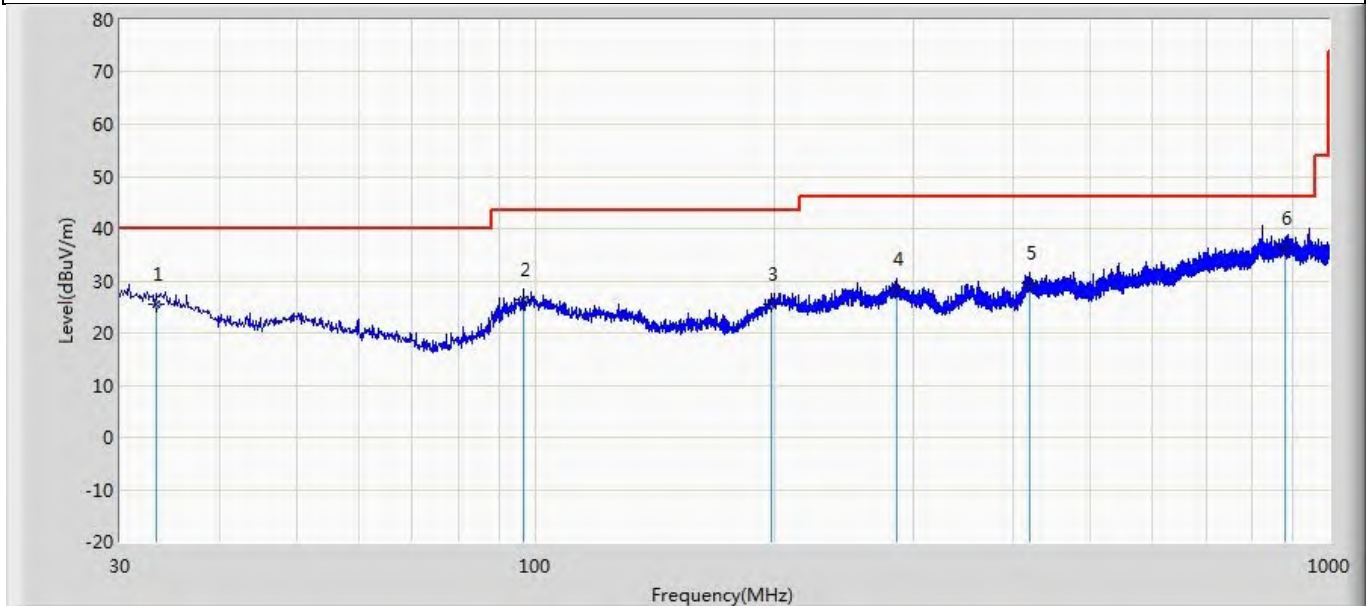
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		4924.000	41.628	56.368	-32.372	74.000	-14.741	PK
2		7386.000	44.350	55.215	-29.650	74.000	-10.866	PK
3	*	9840.000	52.712	60.615	-21.288	74.000	-7.903	PK

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. This limit applies for both peak and average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. The points in graph are the highest data in test frequency range.
5. We use band filter 2400-2483.5Mhz, starting frequency 1GHz, ending frequency 6GHz, we also use high pass filter 3Ghz-18Ghz, the plots in the report is composite.

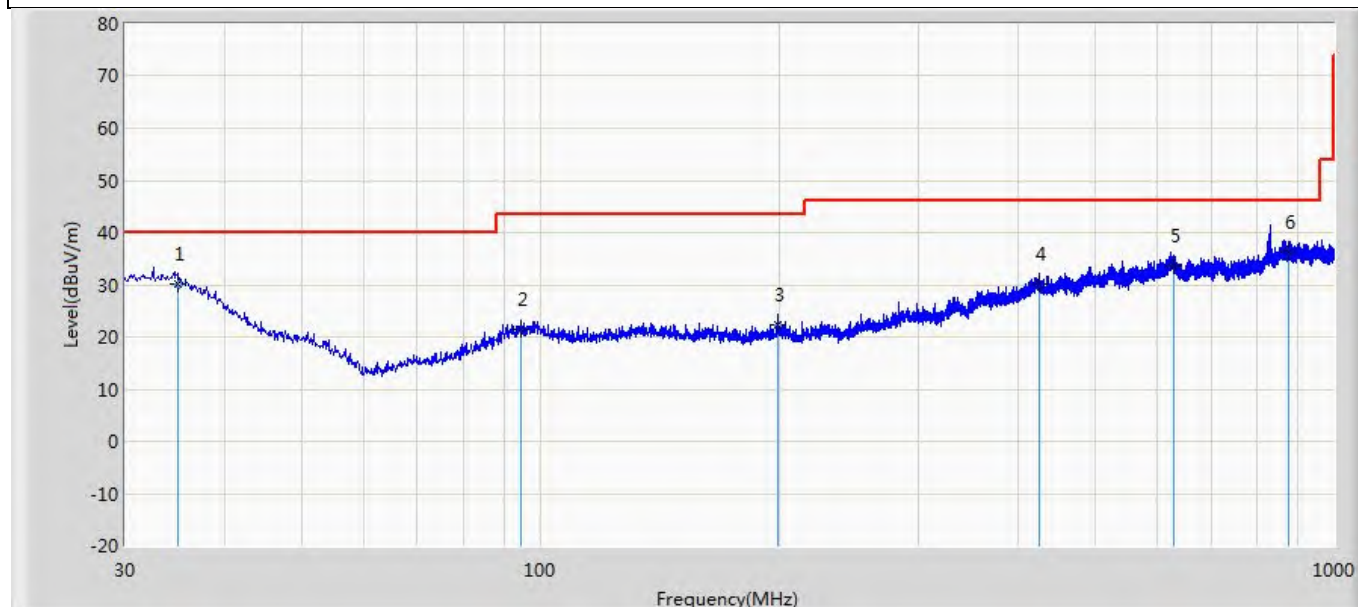
The worst case of Radiated Emission below 1GHz:

Profile: 22A0568R	Page No.: 46
Engineer: Yu Liu	
Site: AC3	Time: 2022/11/21 - 20:33
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode 1: Transmit at 2437MHz by 11b	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		33.274	25.602	2.565	-14.398	40.000	23.037	QP
2		96.687	26.306	5.794	-17.194	43.500	20.512	QP
3		198.416	25.419	2.342	-18.081	43.500	23.076	QP
4		284.867	28.292	3.110	-17.708	46.000	25.182	QP
5		419.091	29.520	2.842	-16.480	46.000	26.678	QP
6	*	879.841	36.368	2.950	-9.632	46.000	33.418	QP

Profile: 22A0568R	Page No.: 47
Engineer: Yu Liu	
Site: AC3	Time: 2022/11/21 - 20:36
Limit: FCC_Part15.209_RE(3m)_ClassB	Margin: 0
Probe: AC3_3M(30-1000M)	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode 1: Transmit at 2437MHz by 11b	



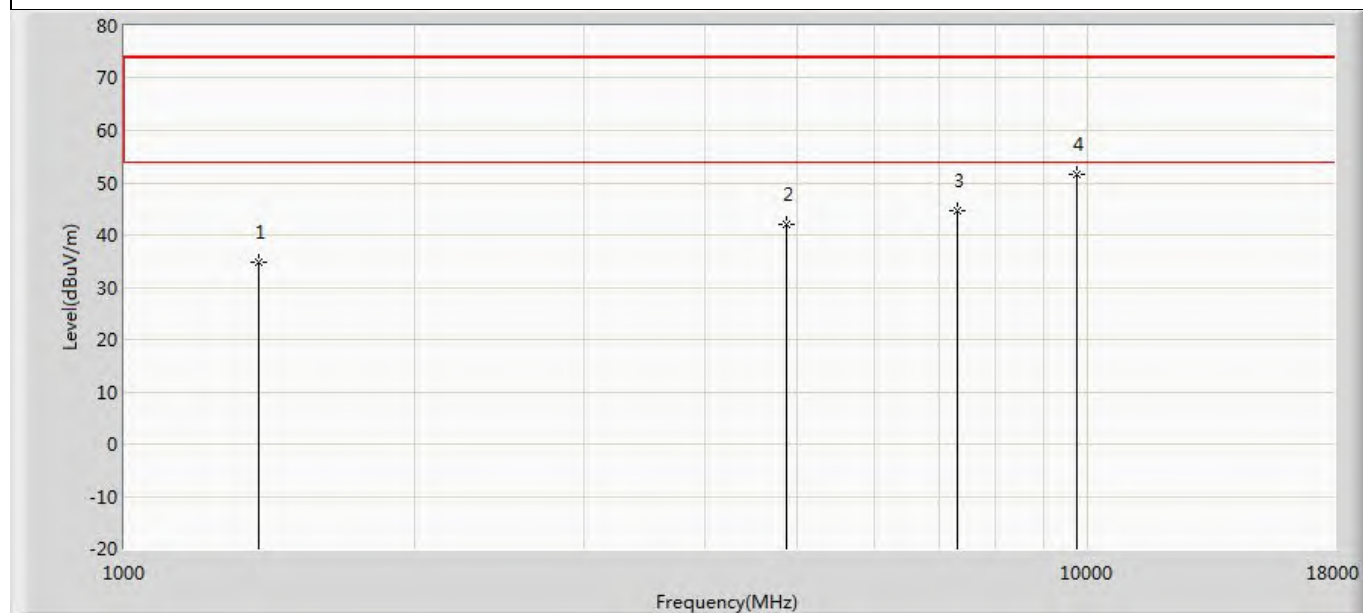
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		34.971	30.214	3.267	-9.786	40.000	26.947	QP
2		94.747	21.309	6.376	-22.191	43.500	14.932	QP
3		199.023	22.240	4.490	-21.260	43.500	17.750	QP
4		425.033	30.053	2.766	-15.947	46.000	27.287	QP
5		627.156	33.751	3.247	-12.249	46.000	30.504	QP
6	*	877.537	36.370	3.902	-9.630	46.000	32.468	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)

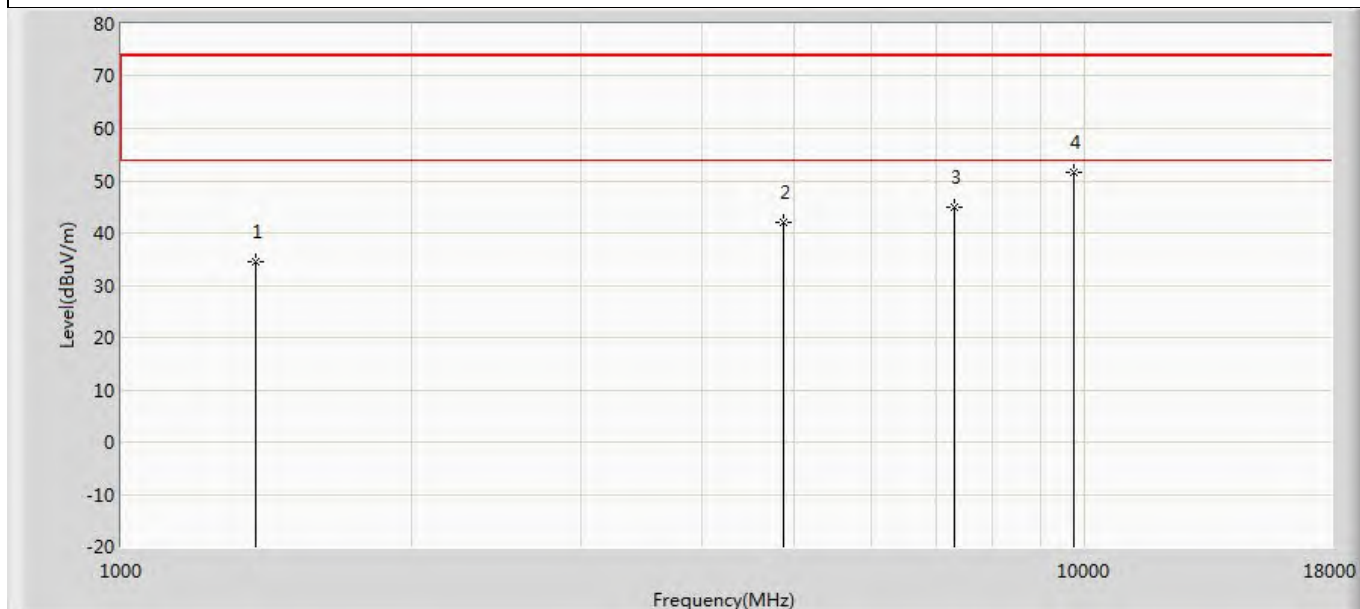
The worst case of Simultaneous Radiated Emission:

Profile: 22A0568R	Page No.: 15
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: WiFi+Tetra	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1380.125	34.885	56.279	-39.115	74.000	-21.394	PK
2		4874.000	42.045	56.655	-31.955	74.000	-14.610	PK
3		7311.000	44.725	55.570	-29.275	74.000	-10.844	PK
4	*	9755.000	51.539	59.270	-22.461	74.000	-7.731	PK

Profile: 22A0568R	Page No.: 16
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: WiFi+Tetra	



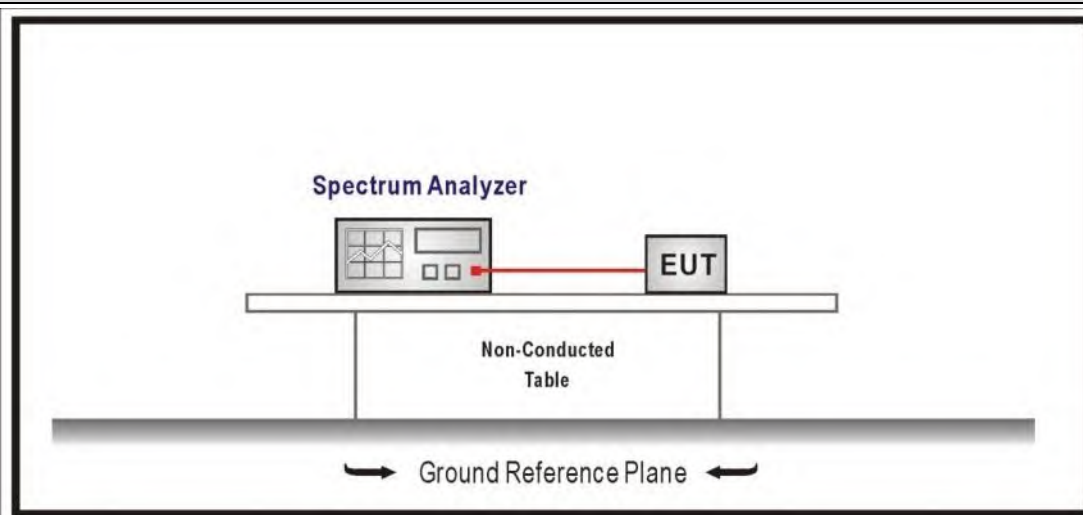
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		1380.125	34.585	55.979	-39.415	74.000	-21.394	PK
2		4874.000	41.956	56.566	-32.044	74.000	-14.610	PK
3		7311.000	44.870	55.715	-29.130	74.000	-10.844	PK
4	*	9755.000	51.490	59.221	-22.510	74.000	-7.731	PK

4.3 Emissions in non-restricted frequency band**VERDICT: PASS****4.3.1 Limit**

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

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

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

4.3.2 Test Setup**4.3.3 Test Procedure**

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

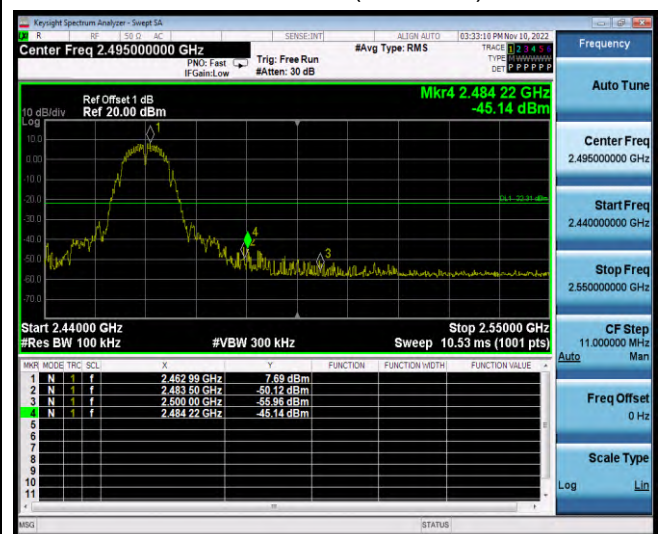
4.3.4 Test Data

Mode	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	7.24	2398.47	-39.17	46.41	≥20	Pass
	11	2462	7.69	2500	-45.14	52.83	≥20	Pass
2	1	2412	4.27	2400	-37.29	41.56	≥20	Pass
	11	2462	5.13	2500	-33.46	38.59	≥20	Pass
3	1	2412	4.50	2400	-37.51	42.01	≥20	Pass
	11	2462	4.84	2500	-39.25	44.09	≥20	Pass

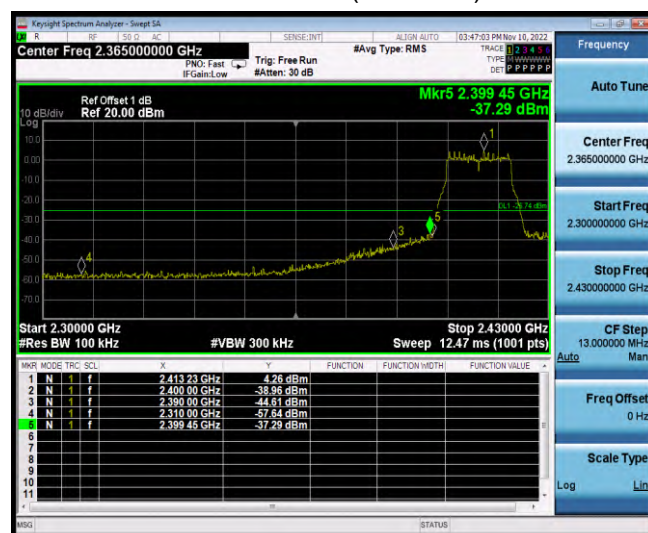
Mode 1 CH01(2412MHz)



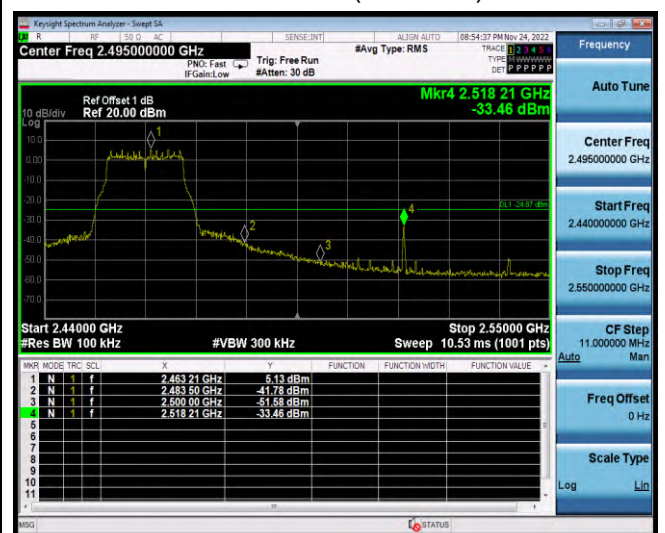
Mode 1 CH11(2462MHz)



Mode 2 CH01(2412MHz)



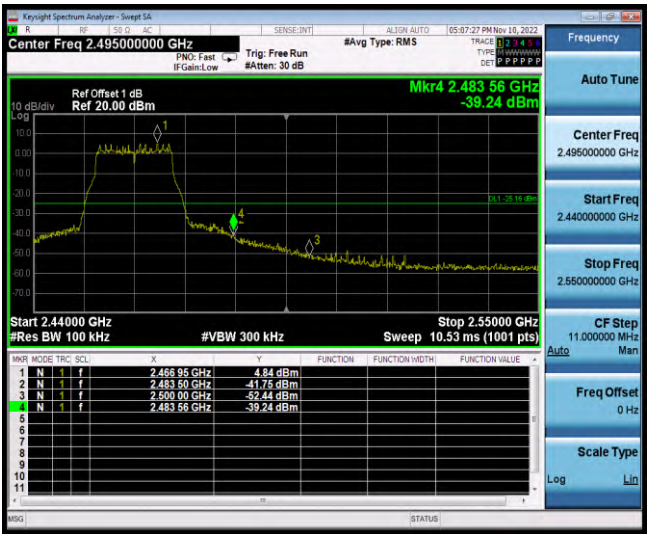
Mode 2 CH11(2462MHz)



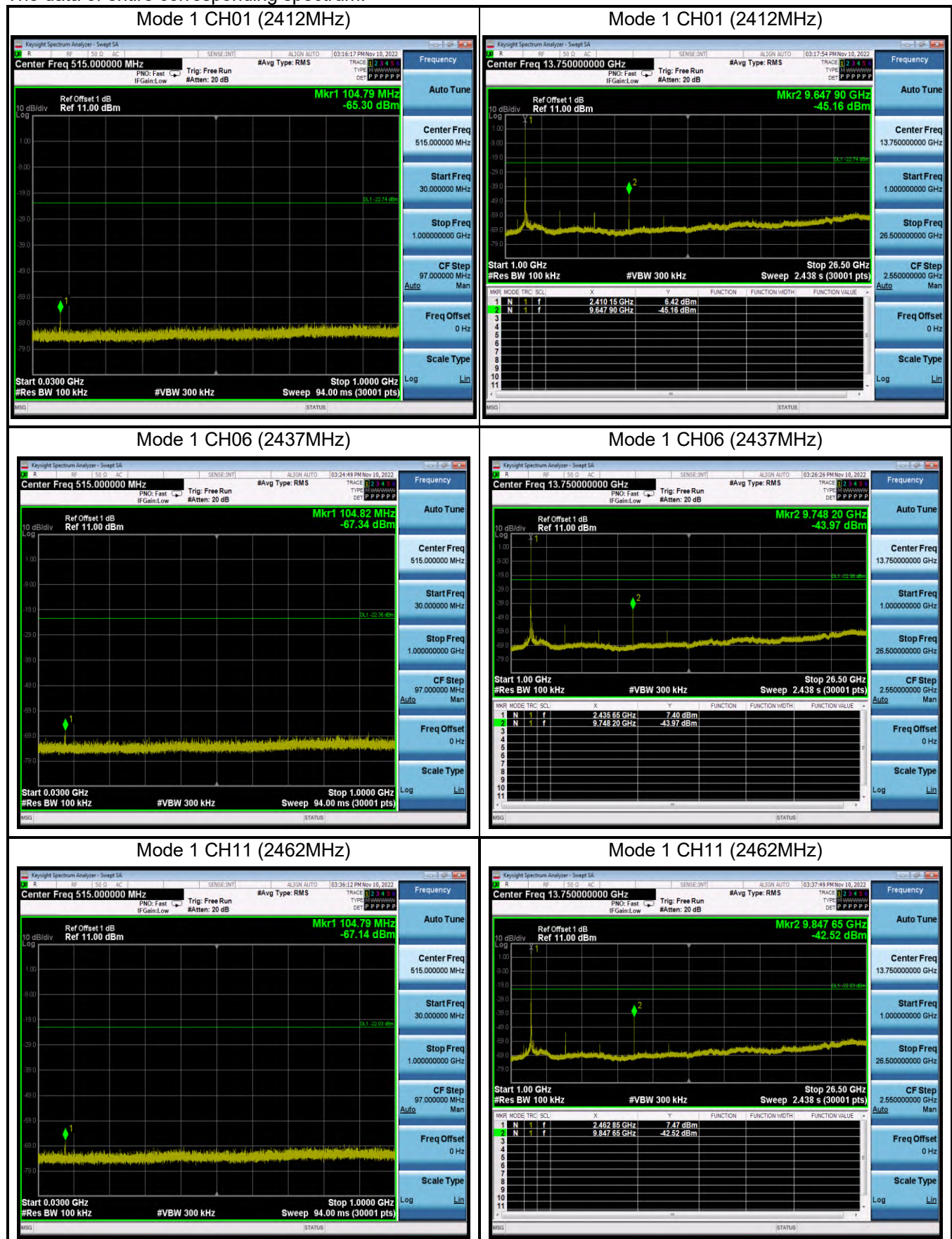
Mode 3 CH01(2412MHz)



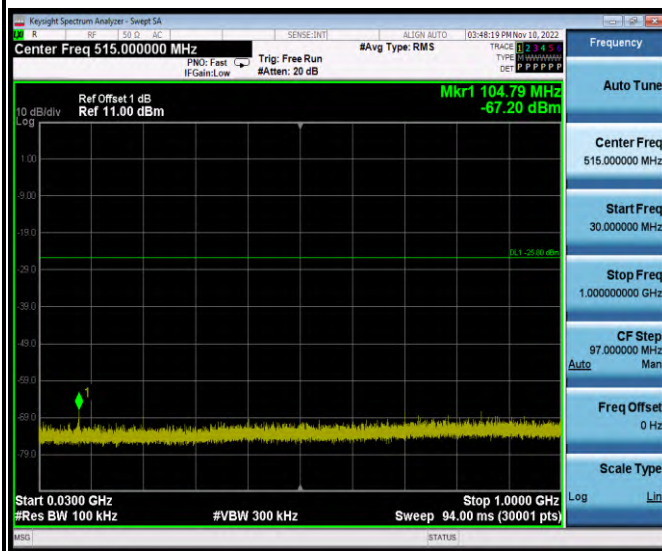
Mode 3 CH11(2462MHz)



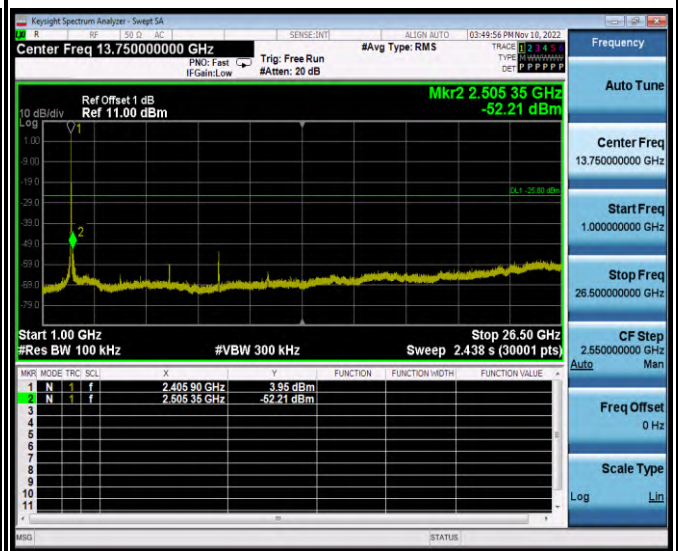
The data of entire corresponding spectrum:



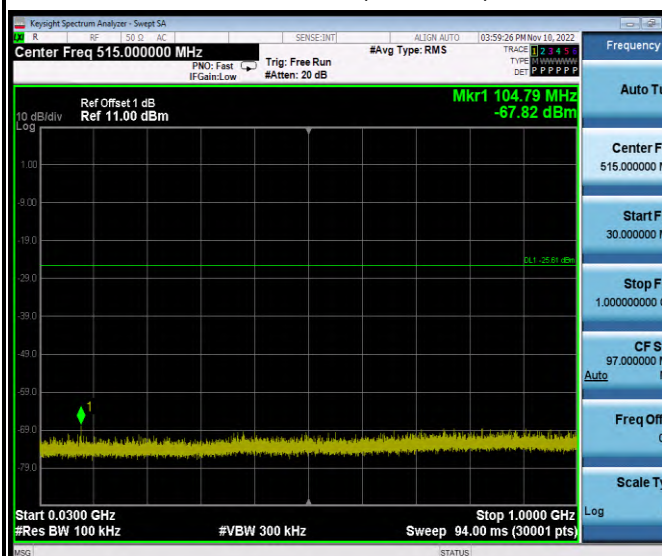
Mode 2 CH01 (2412MHz)



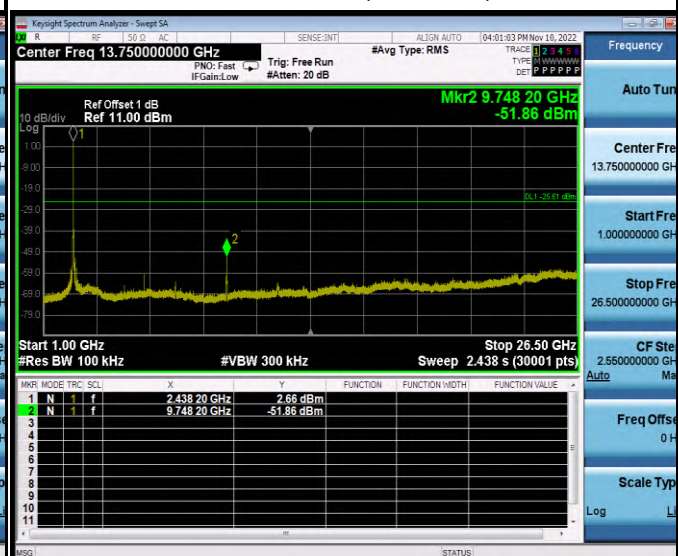
Mode 2 CH01 (2412MHz)



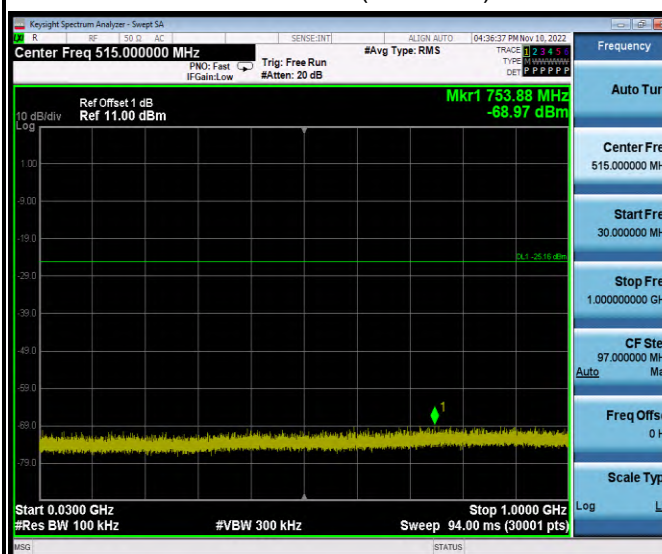
Mode 2 CH06 (2437MHz)



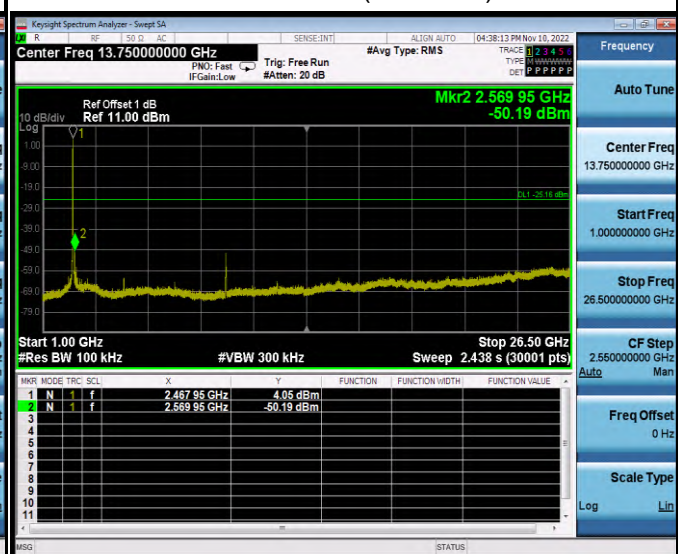
Mode 2 CH06 (2437MHz)



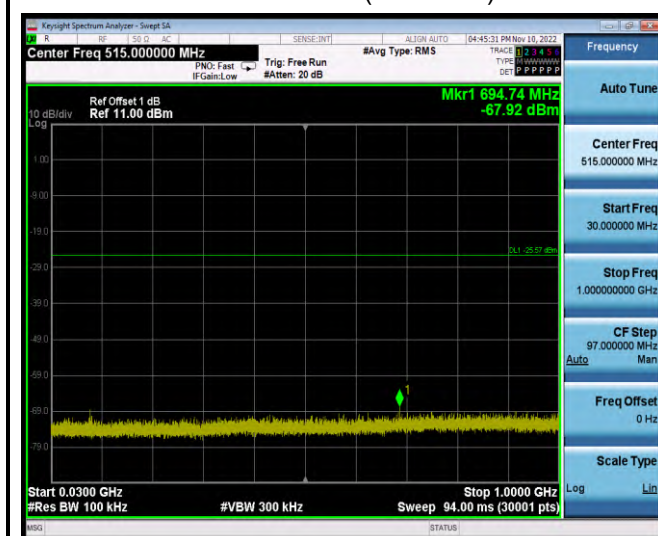
Mode 2 CH11 (2462MHz)



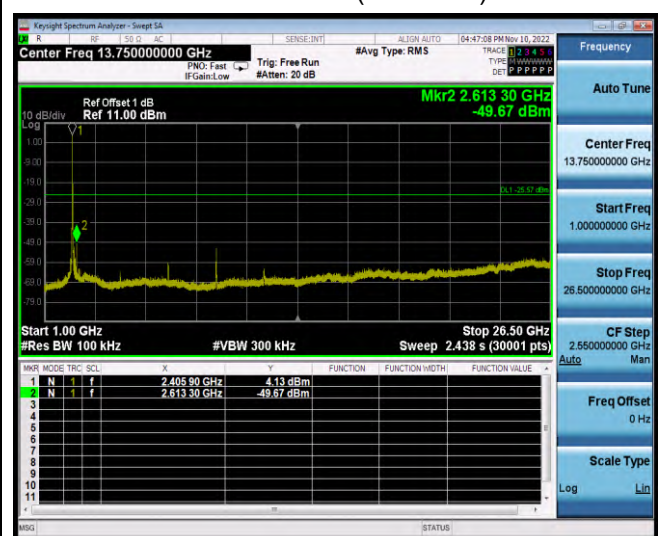
Mode 2 CH11 (2462MHz)



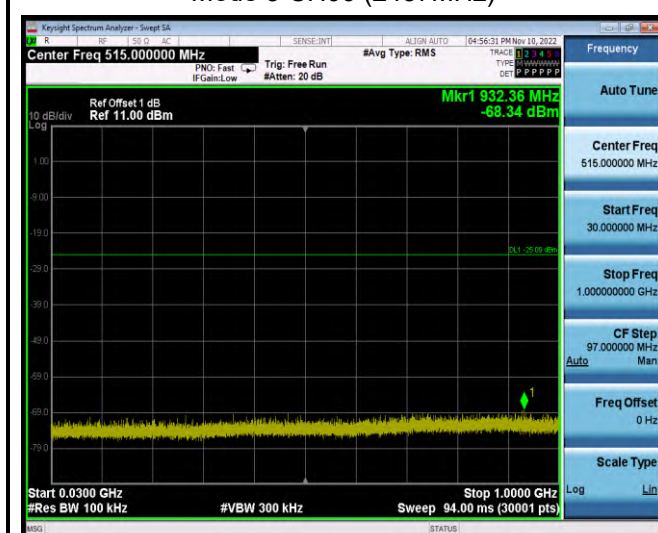
Mode 3 CH01 (2412MHz)



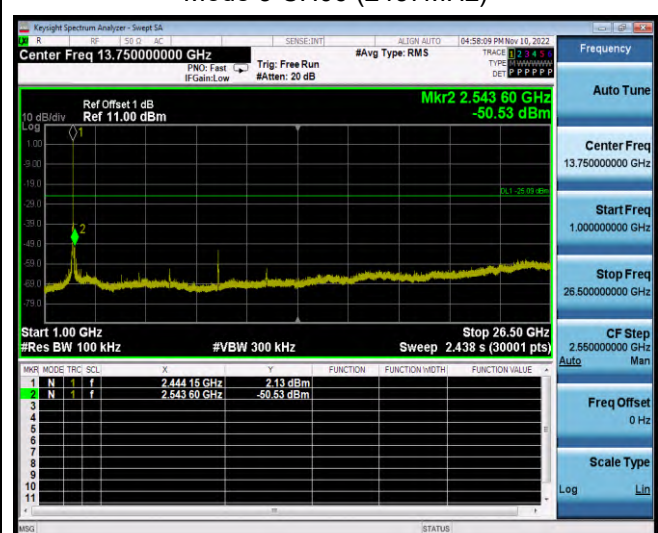
Mode 3 CH01 (2412MHz)



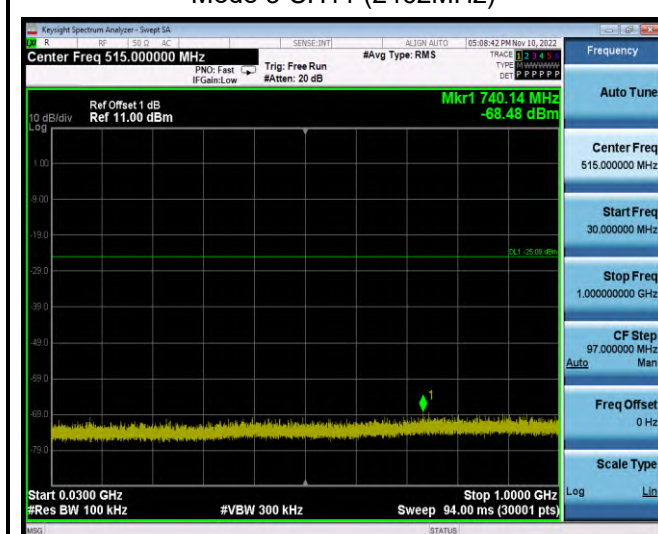
Mode 3 CH06 (2437MHz)



Mode 3 CH06 (2437MHz)



Mode 3 CH11 (2462MHz)



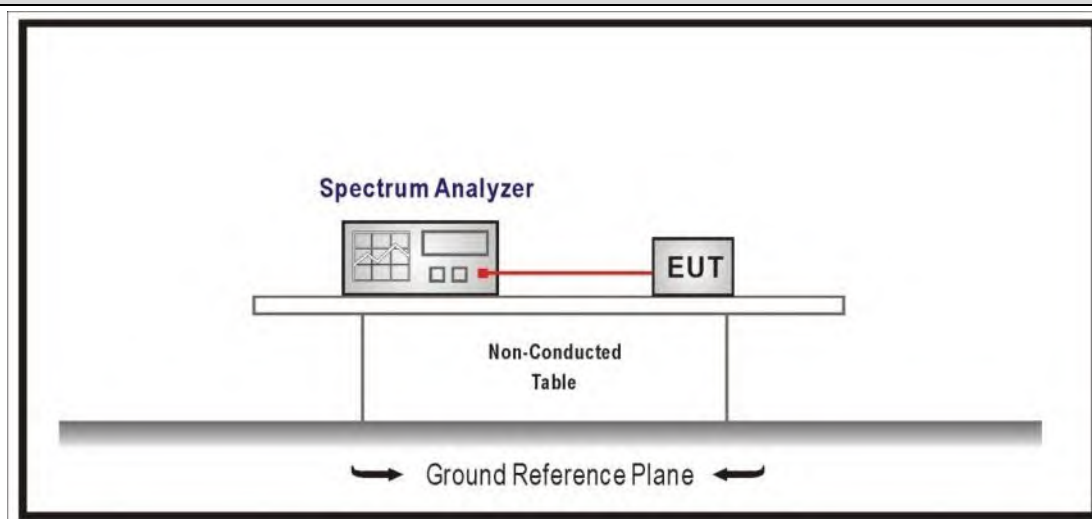
Mode 3 CH11 (2462MHz)



4.4 Duty cycle	VERDICT: PASS
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4.4.1 Limit

N/A

4.4.2 Test Setup**4.4.3 Test Procedure**

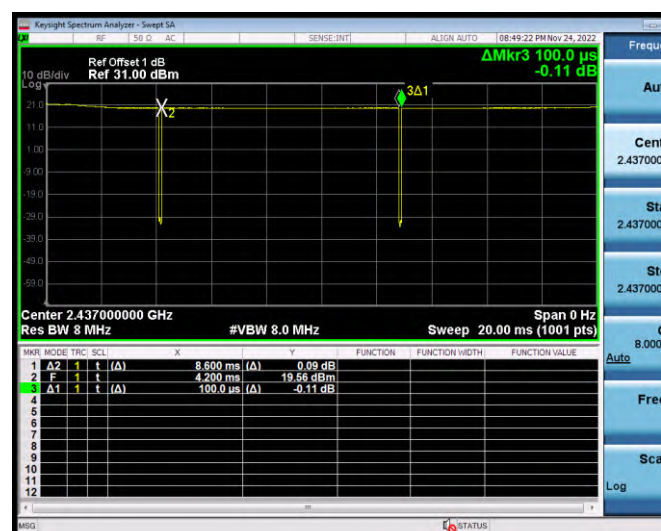
References Rule	Chapter	Description
☒ ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

4.4.4 Test Data

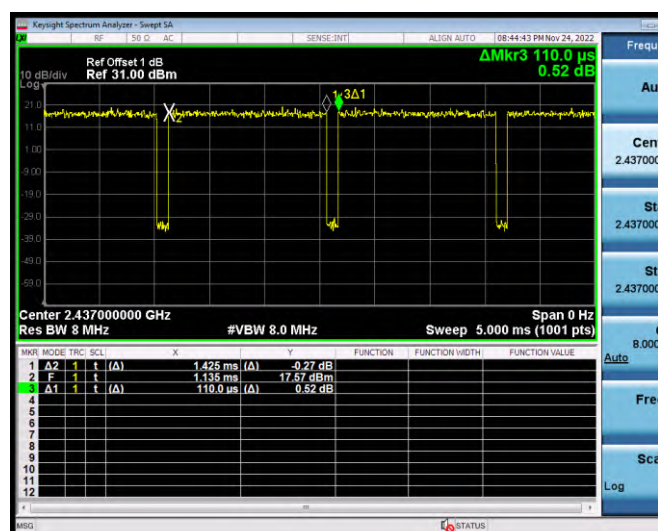
Test Mode	Tx On (ms)	Tx On + Tx Off (ms)	Duty Cycle (%)
Mode 1	8.600	8.700	98.85
Mode 2	1.425	1.535	92.83
Mode 3	1.430	1.540	92.86

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.

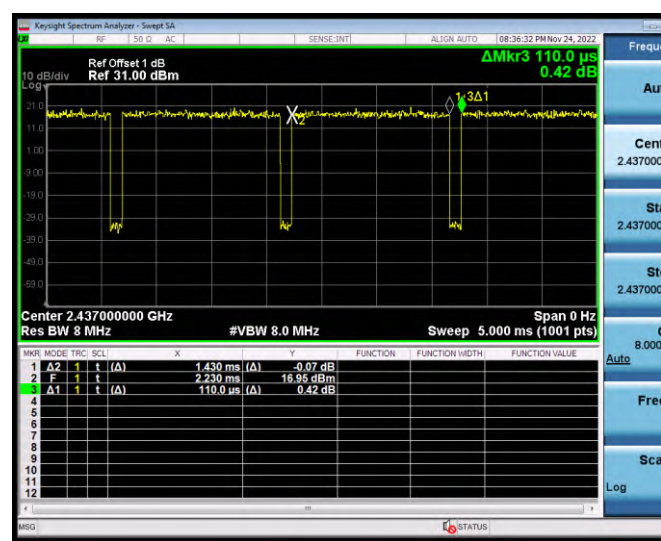
Mode 1 2437MHz



Mode 2 2437MHz



Mode 3 2437MHz



--

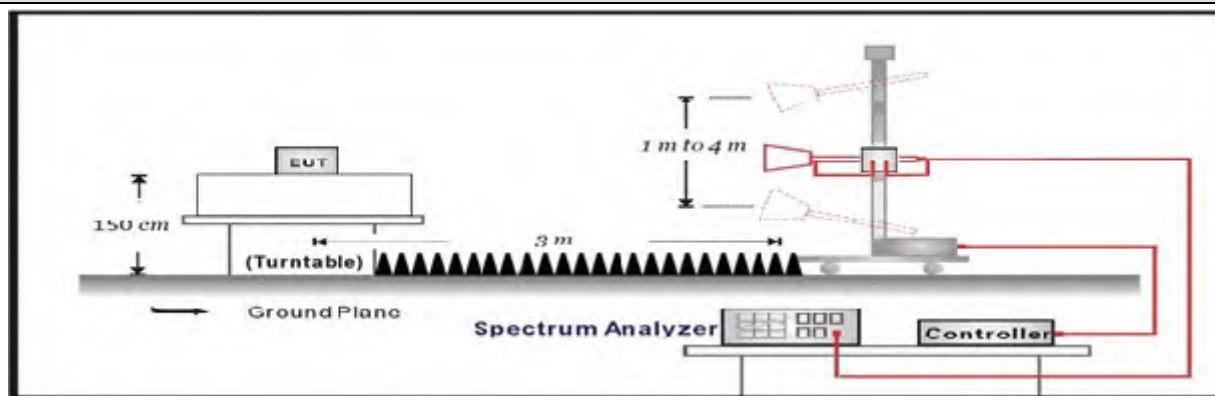
4.5 Radiated Emission Band Edge**VERDICT: PASS****4.5.1 Limit**

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 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.

4.5.2 Test Setup

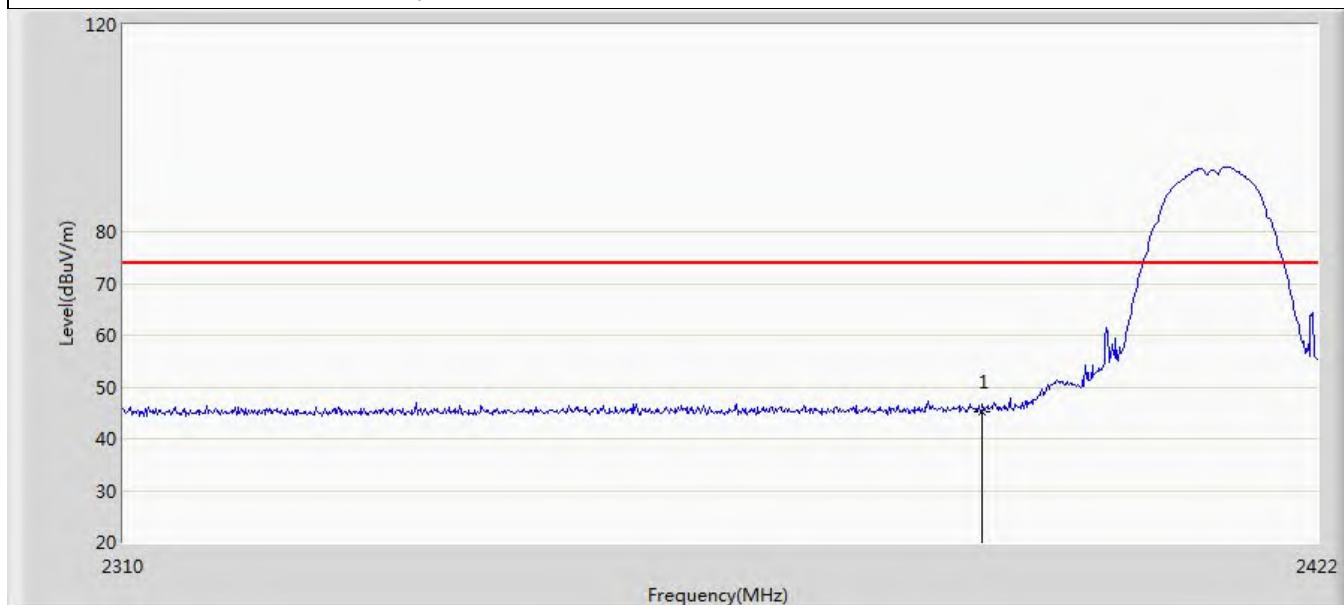
Above 1GHz Test Setup:



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

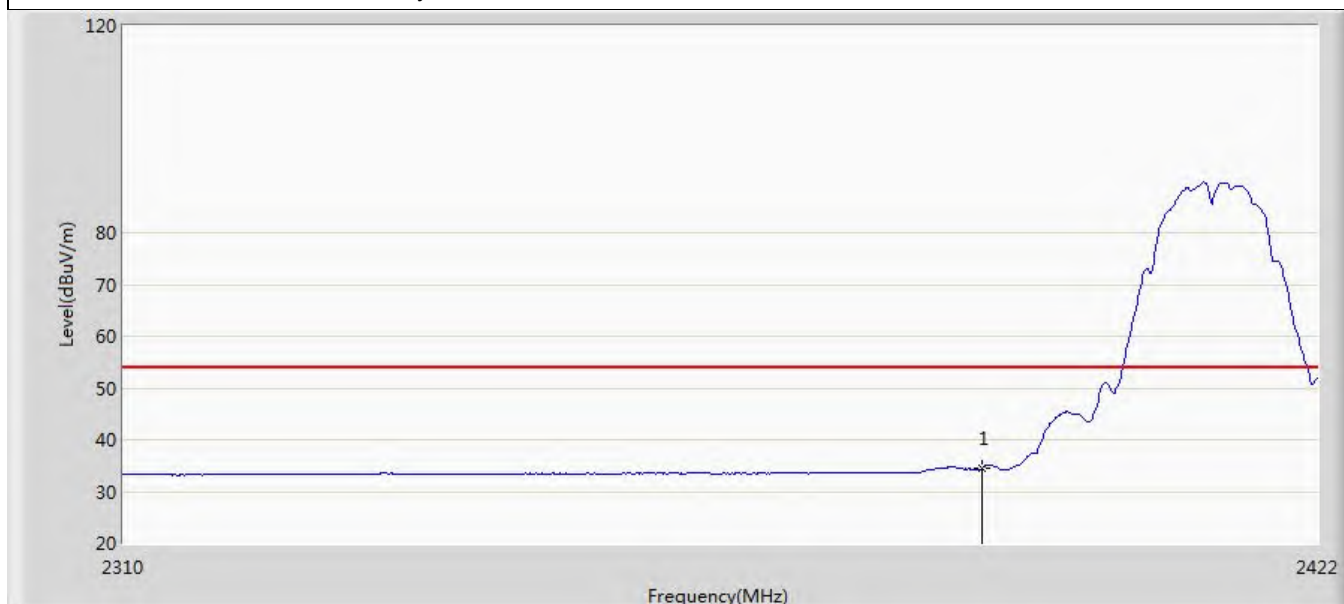
4.5.4 Test Data

Profile: 22A0568R	Page No.: 1
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:42
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1:Transmit at 2412MHz by 11b	



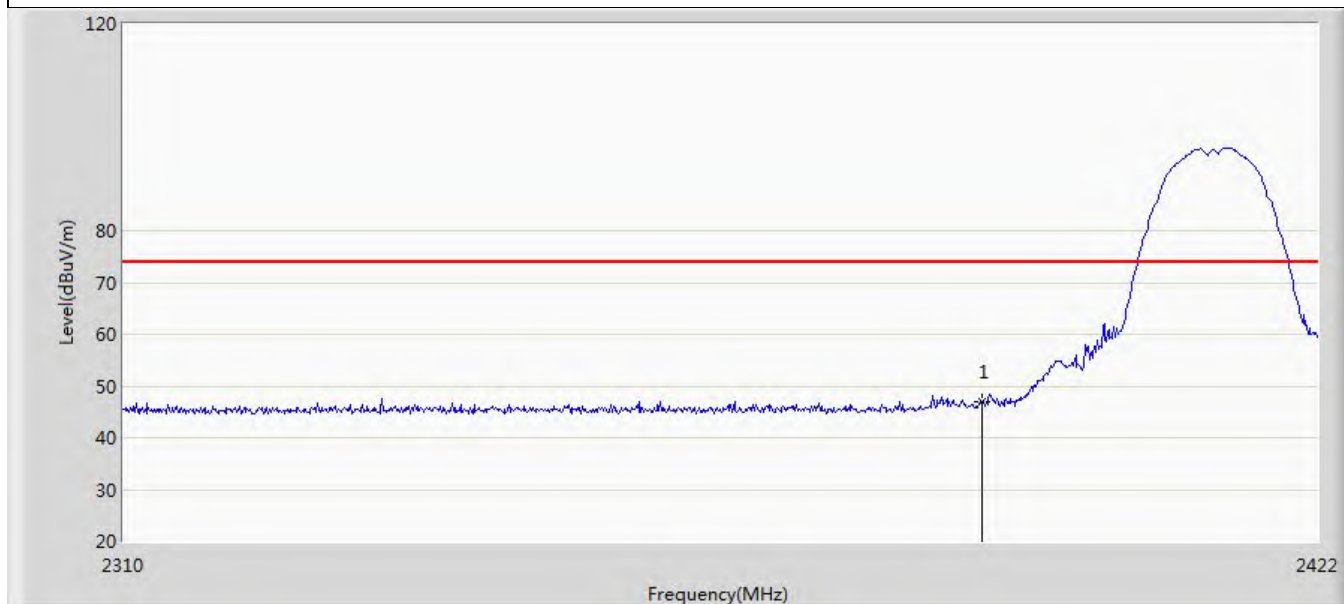
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.339	11.255	-28.661	74.000	34.084	PK

Profile: 22A0568R	Page No.: 2
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:49
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11b	



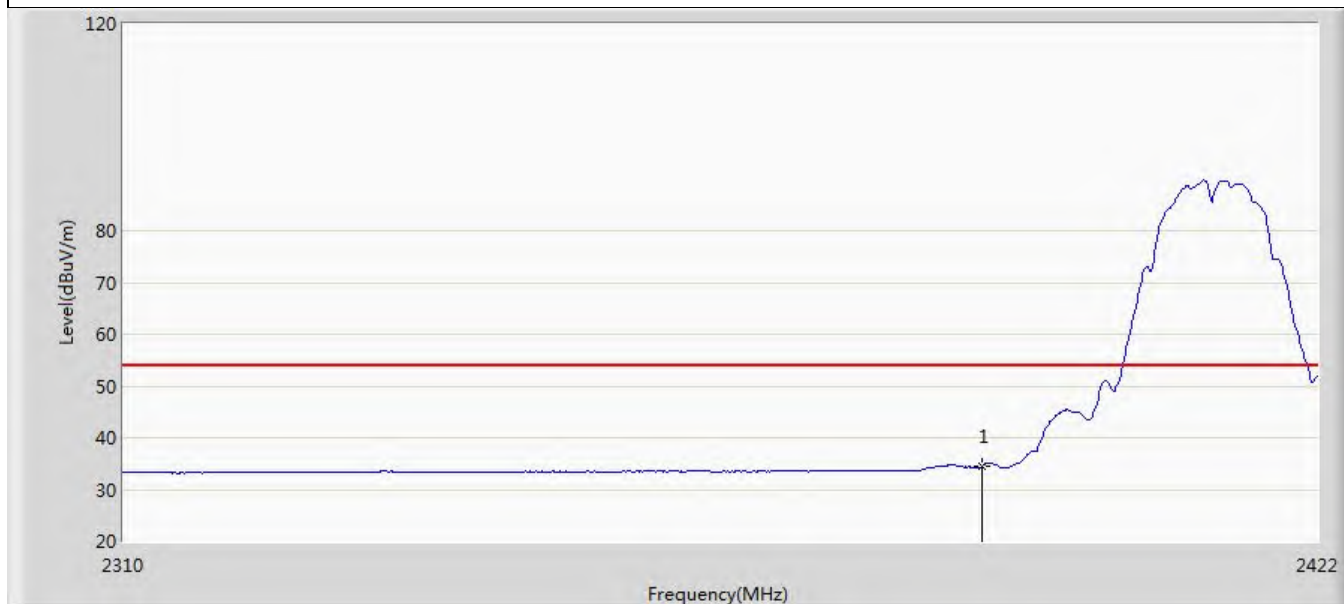
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.498	0.414	-19.502	54.000	34.084	AV

Profile: 22A0568R	Page No.: 3
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:51
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11b	



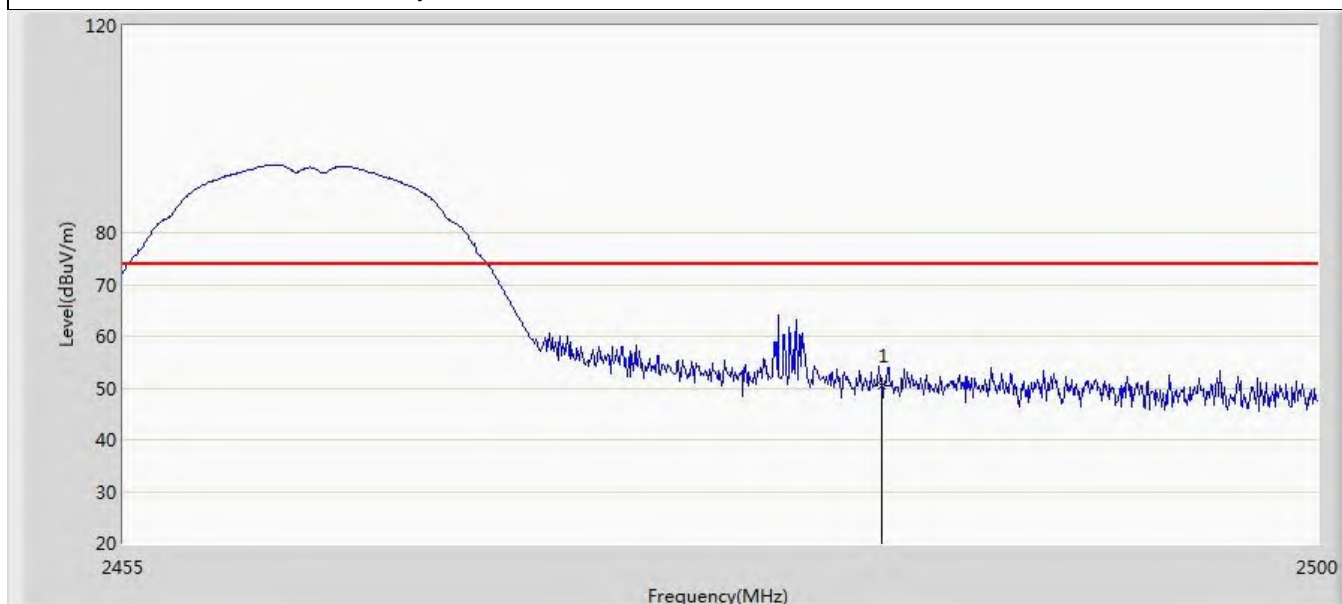
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	46.824	12.740	-27.176	74.000	34.084	PK

Profile: 22A0568R	Page No.: 4
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11b	



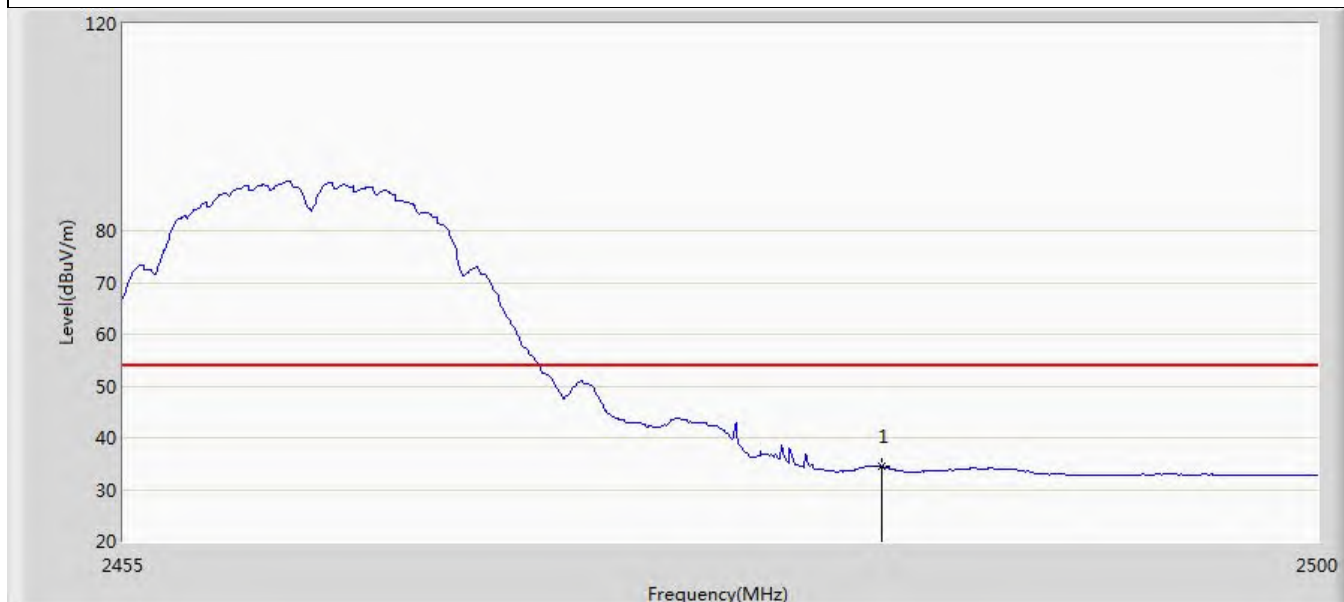
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	34.498	0.414	-19.502	54.000	34.084	AV

Profile: 22A0568R	Page No.: 5
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:54
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



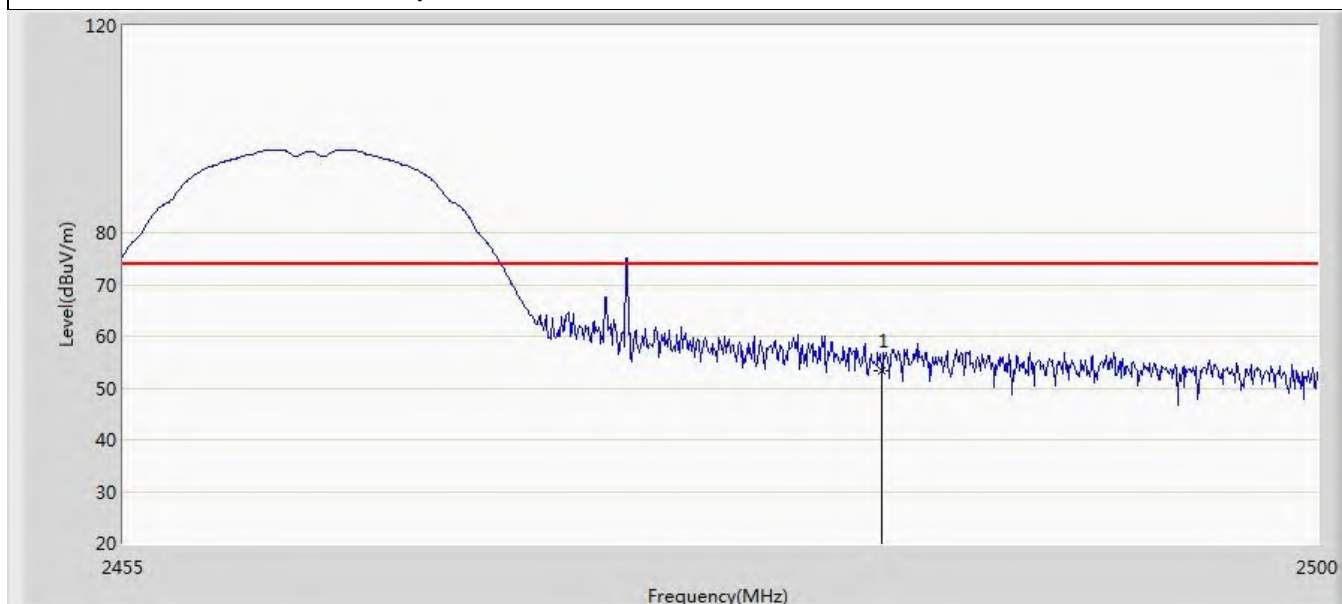
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	50.402	15.911	-23.598	74.000	34.491	PK

Profile: 22A0568R	Page No.: 6
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 22:59
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



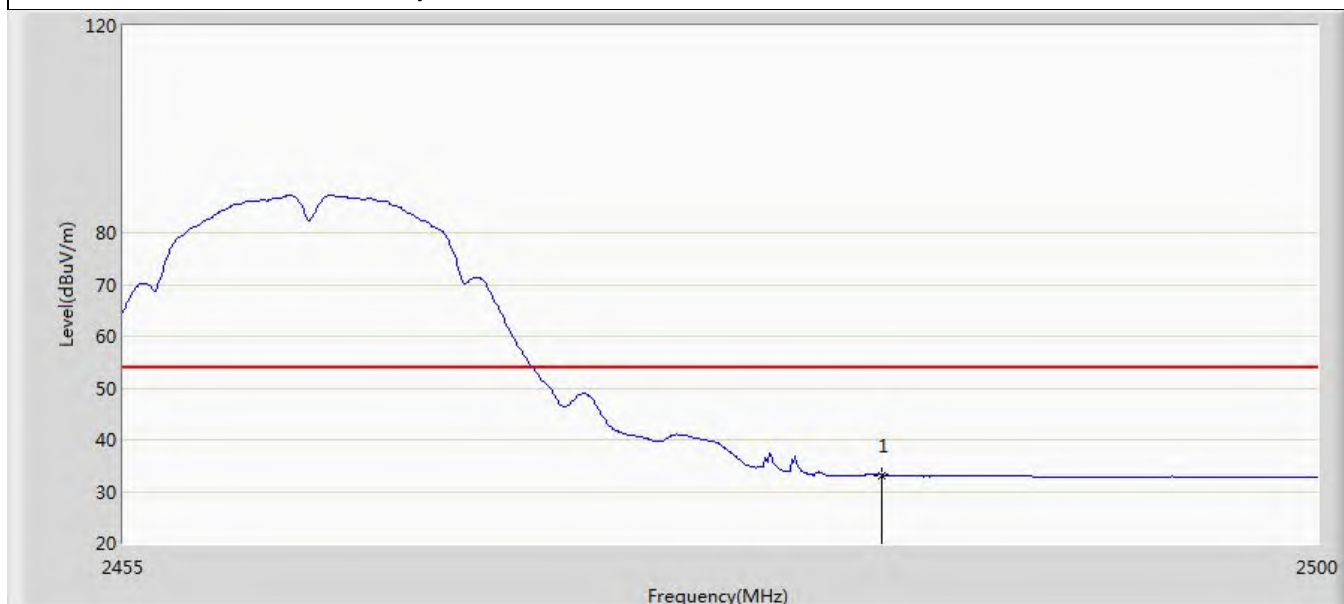
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	34.438	-0.053	-19.562	54.000	34.491	AV

Profile: 22A0568R	Page No.: 7
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:00
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



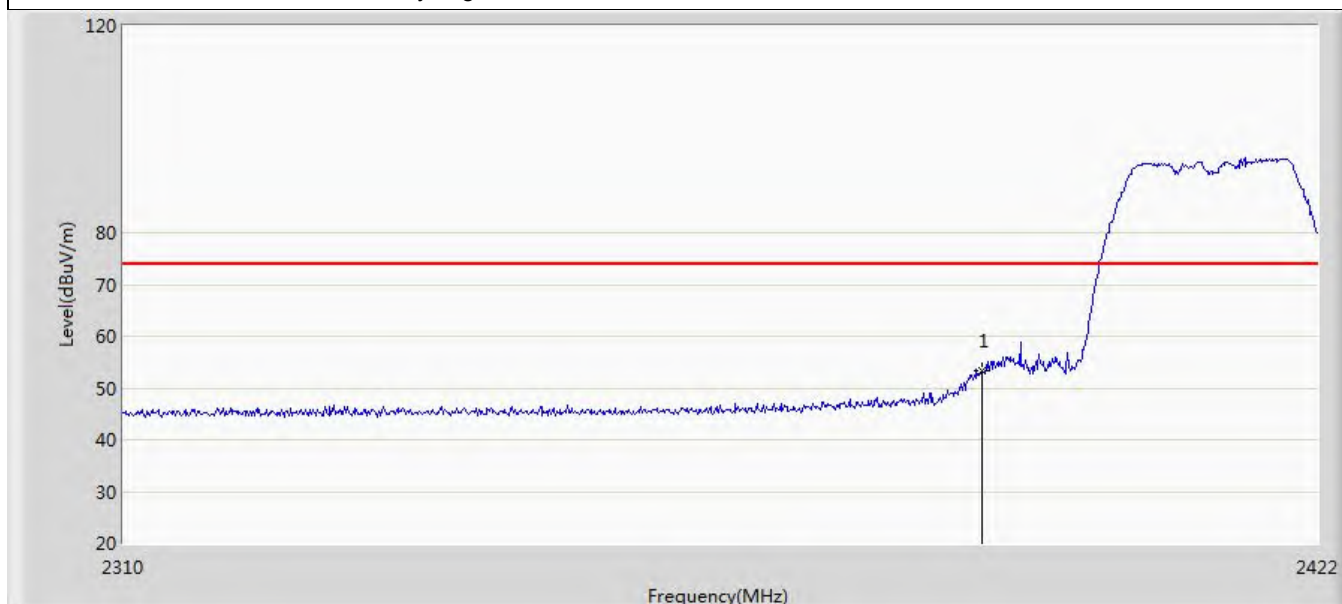
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.374	18.883	-20.626	74.000	34.491	PK

Profile: 22A0568R	Page No.: 8
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11b	



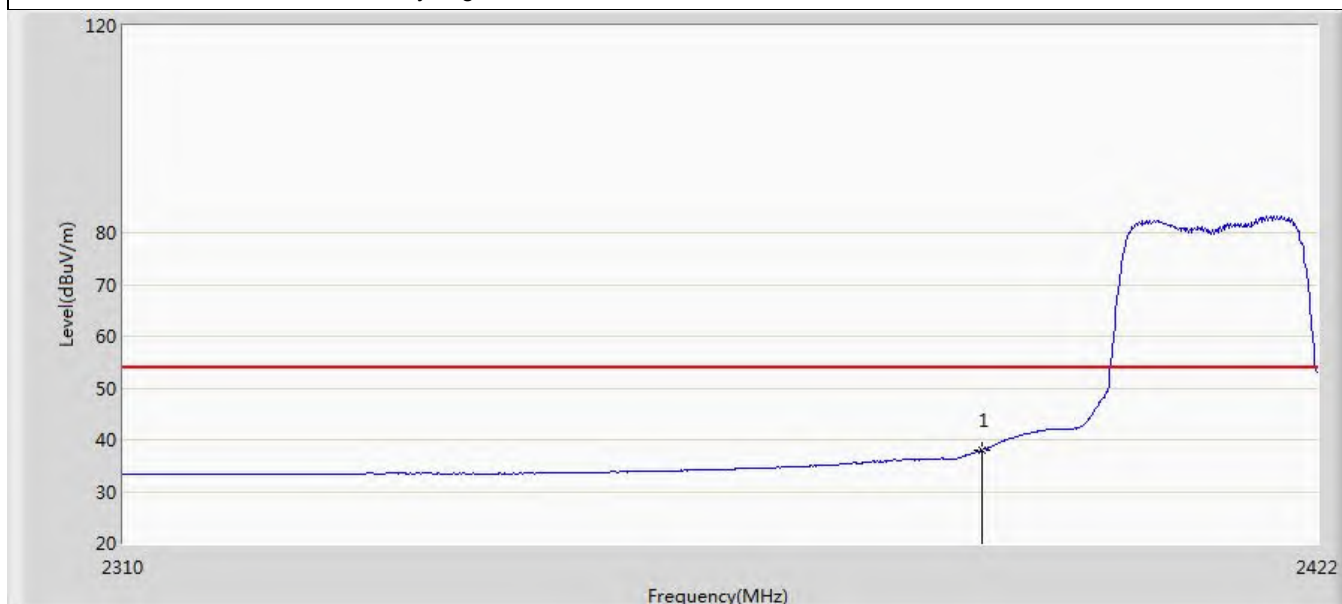
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	33.187	-1.304	-20.813	54.000	34.491	AV

Profile: 22A0568R	Page No.: 9
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11g	



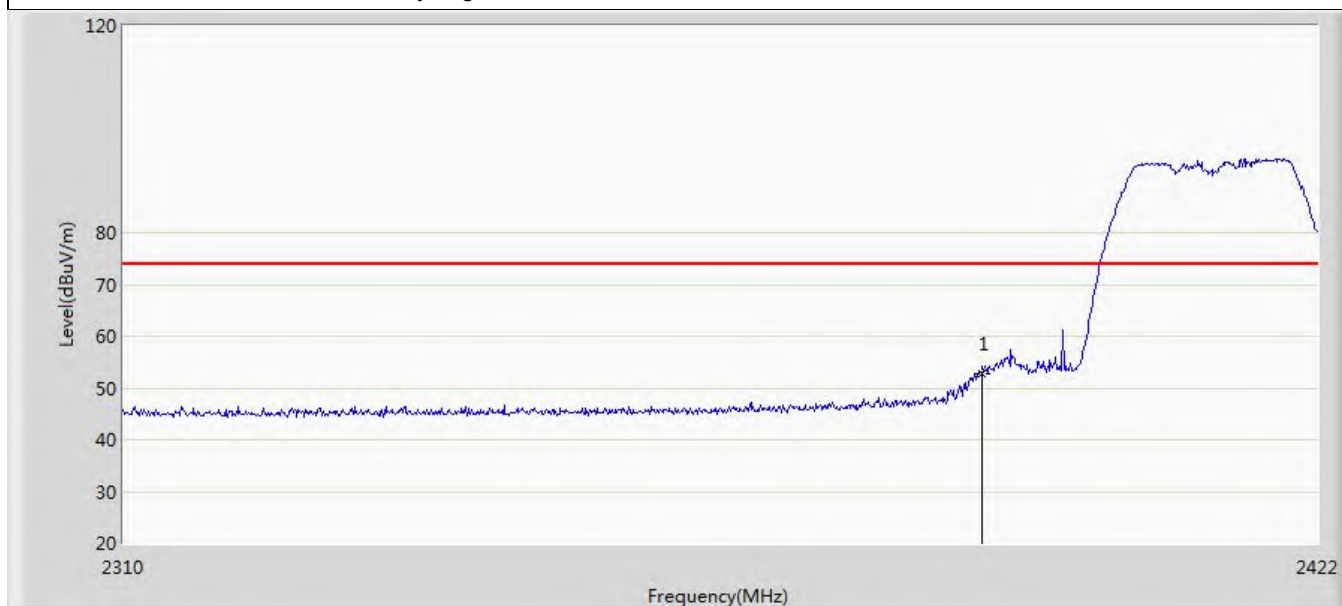
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	53.251	19.167	-20.749	74.000	34.084	PK

Profile: 22A0568R	Page No.: 10
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:06
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11g	



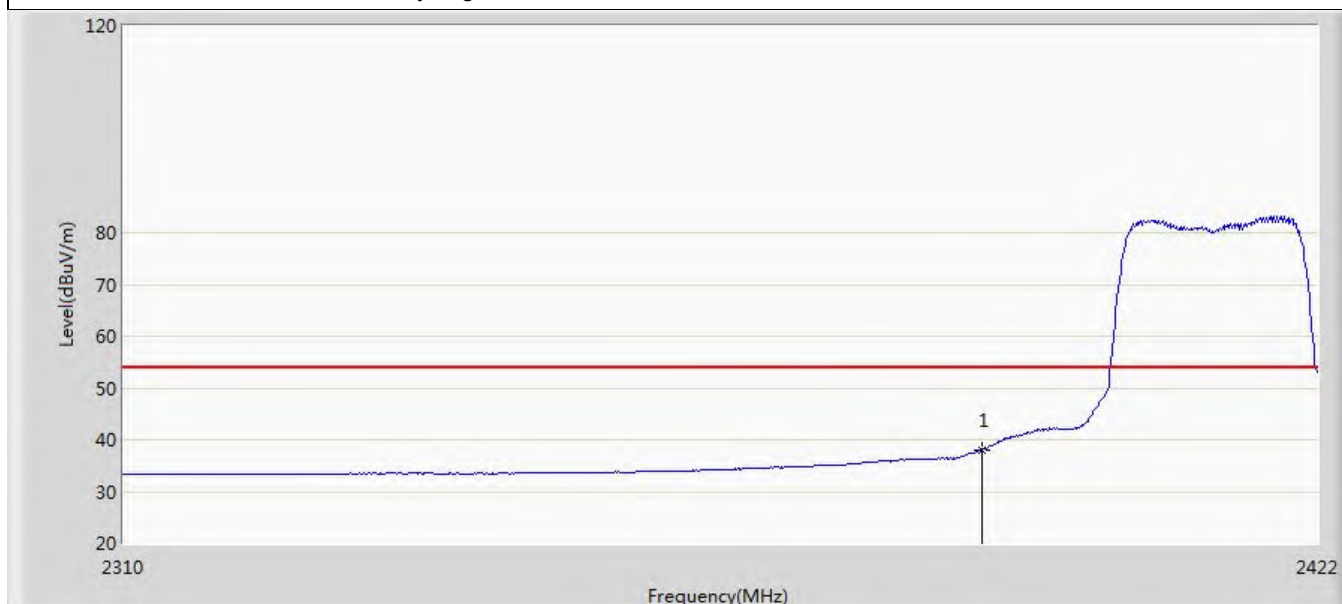
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	37.910	3.826	-16.090	54.000	34.084	AV

Profile: 22A0568R	Page No.: 11
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:08
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11g	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.849	18.765	-21.151	74.000	34.084	PK

Profile: 22A0568R	Page No.: 12
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11g	



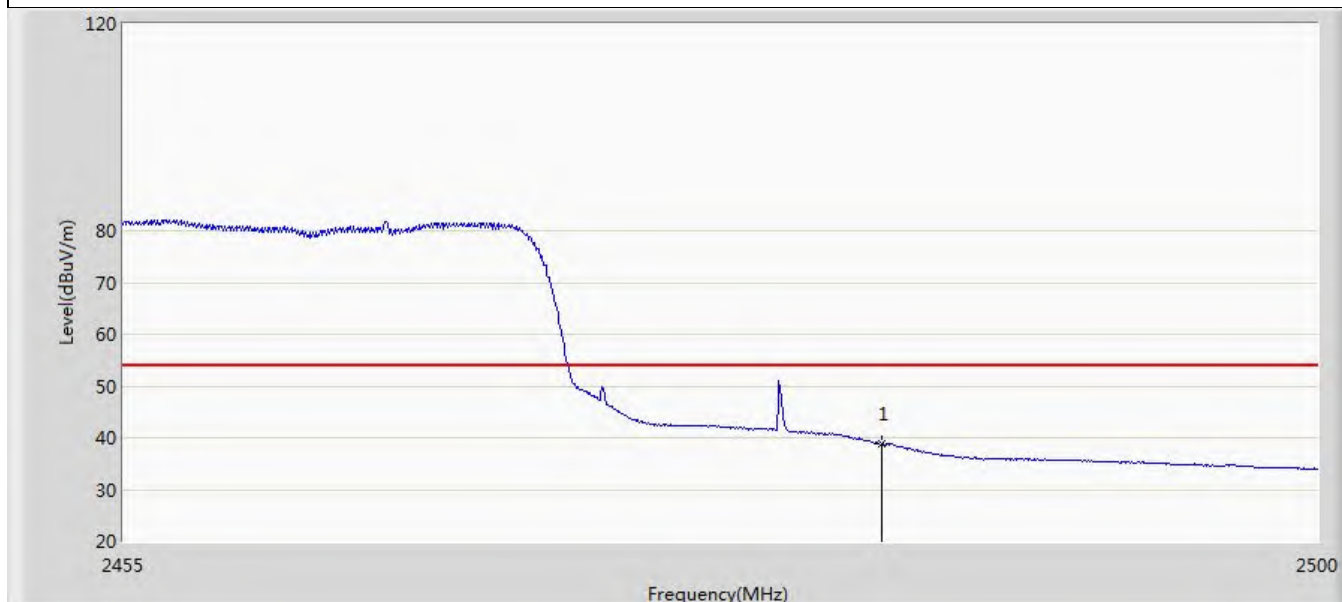
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	38.033	3.949	-15.967	54.000	34.084	AV

Profile: 22A0568R	Page No.: 13
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11g	



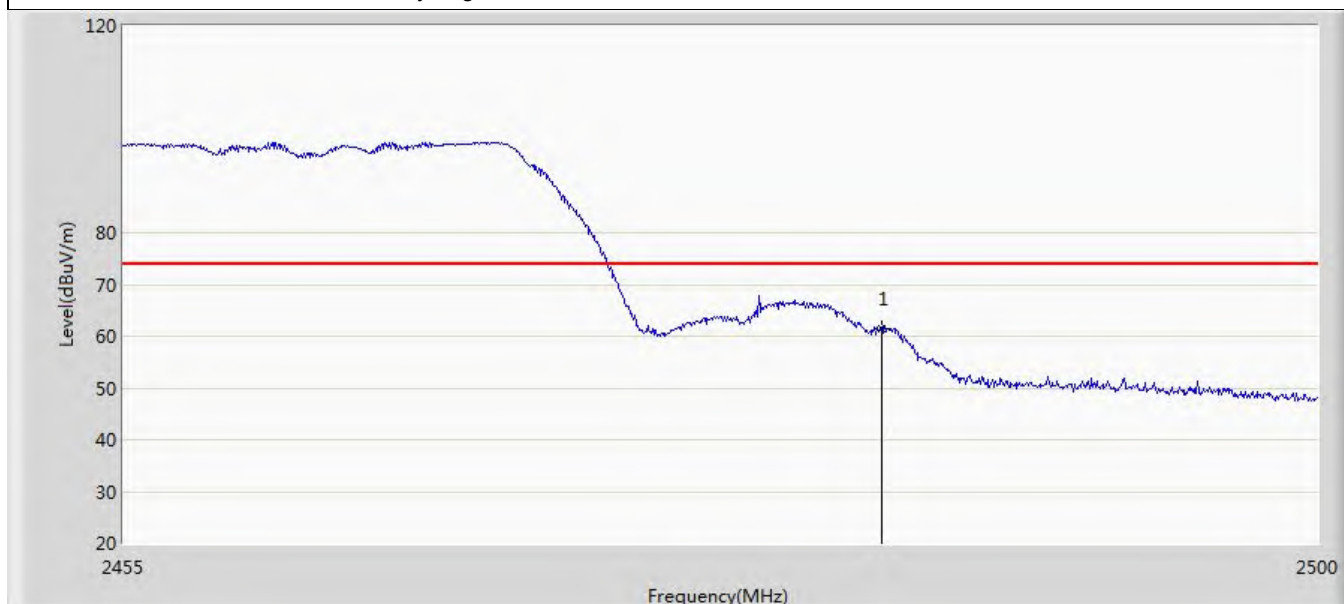
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	56.754	22.263	-17.246	74.000	34.491	PK

Profile: 22A0568R	Page No.: 14
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11g	



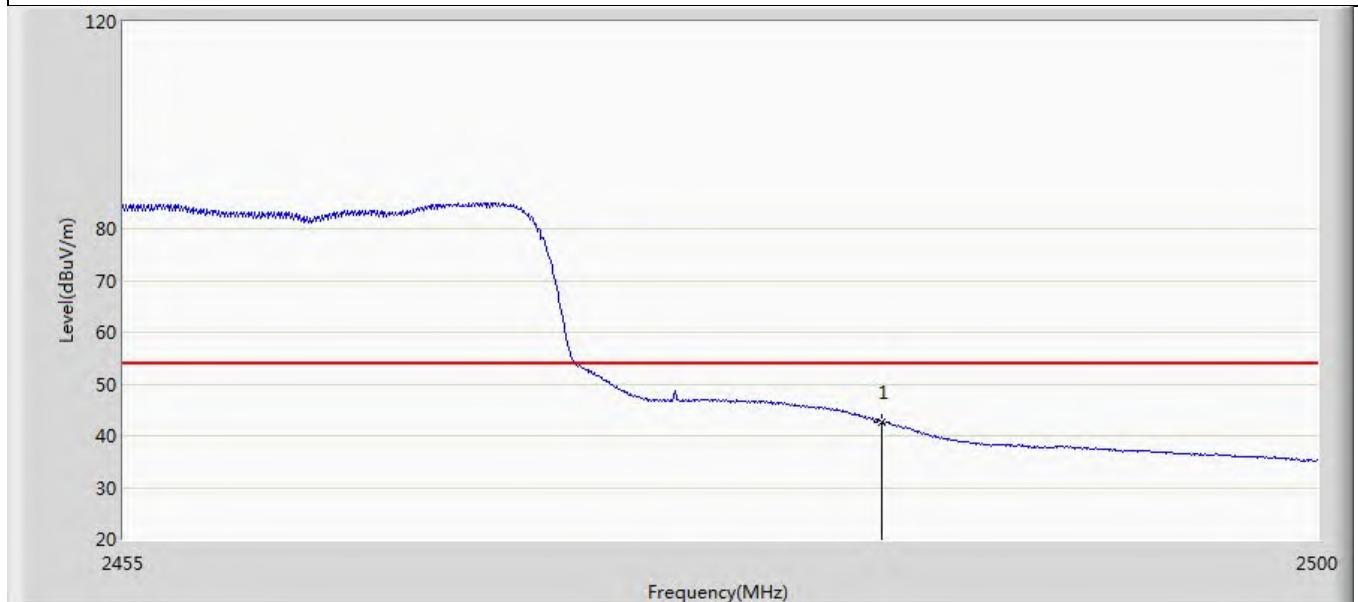
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	38.747	4.256	-15.253	54.000	34.491	AV

Profile: 22A0568R	Page No.: 15
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11g	



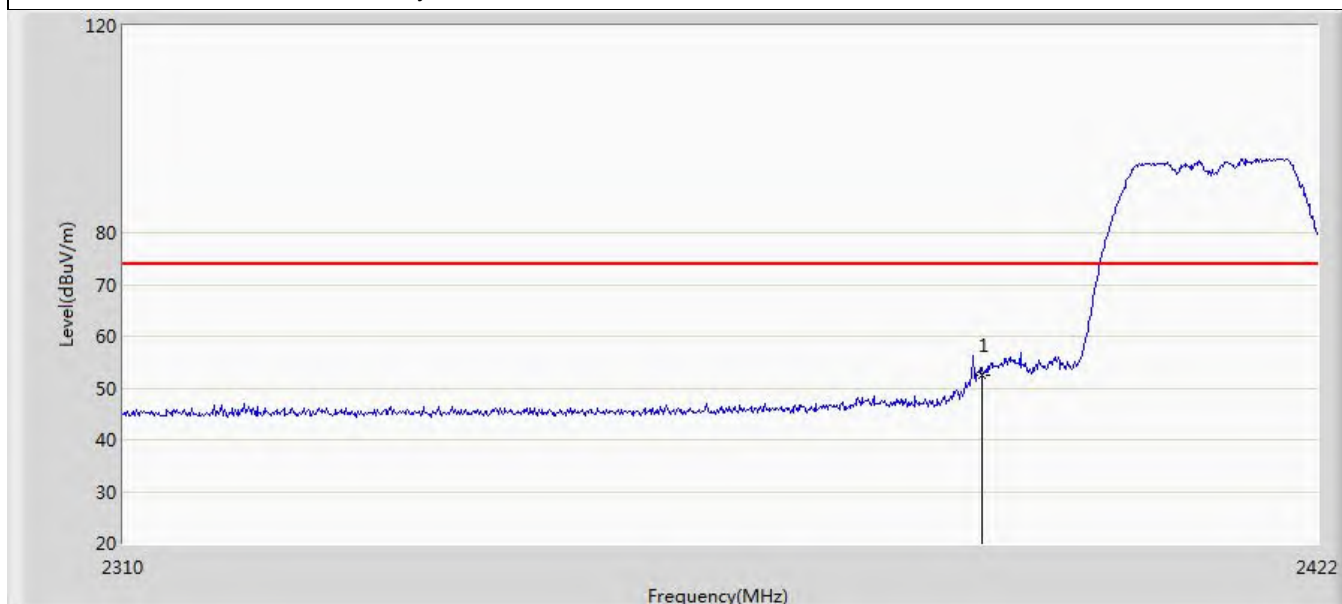
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	61.344	26.853	-12.656	74.000	34.491	PK

Profile: 22A0568R	Page No.: 16
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:17
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1:Transmit at 2462MHz by 11g	



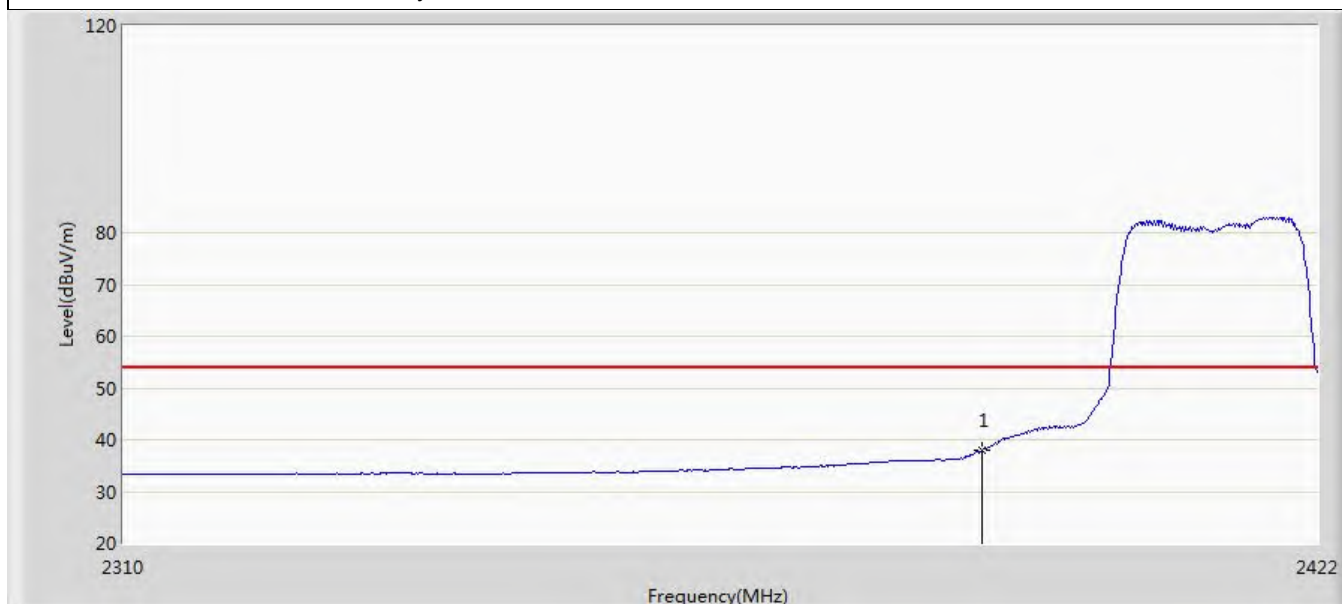
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	42.655	8.164	-11.345	54.000	34.491	AV

Profile: 22A0568R	Page No.: 17
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:19
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11n20	



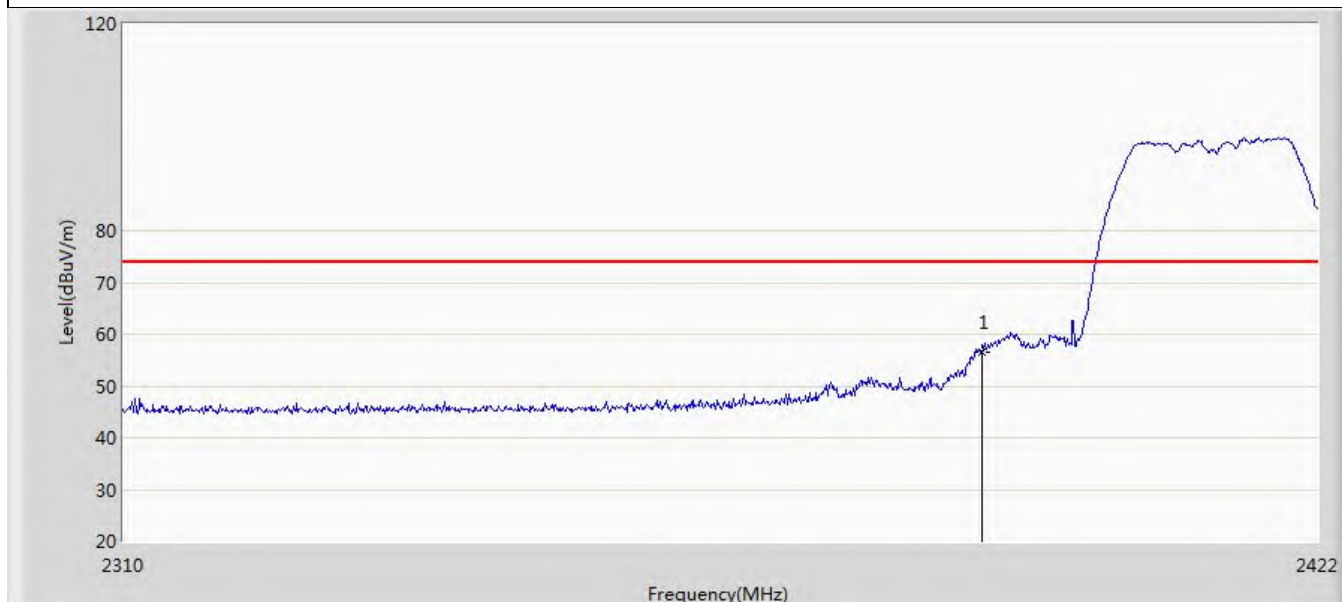
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.378	18.294	-21.622	74.000	34.084	PK

Profile: 22A0568R	Page No.: 18
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11n20	



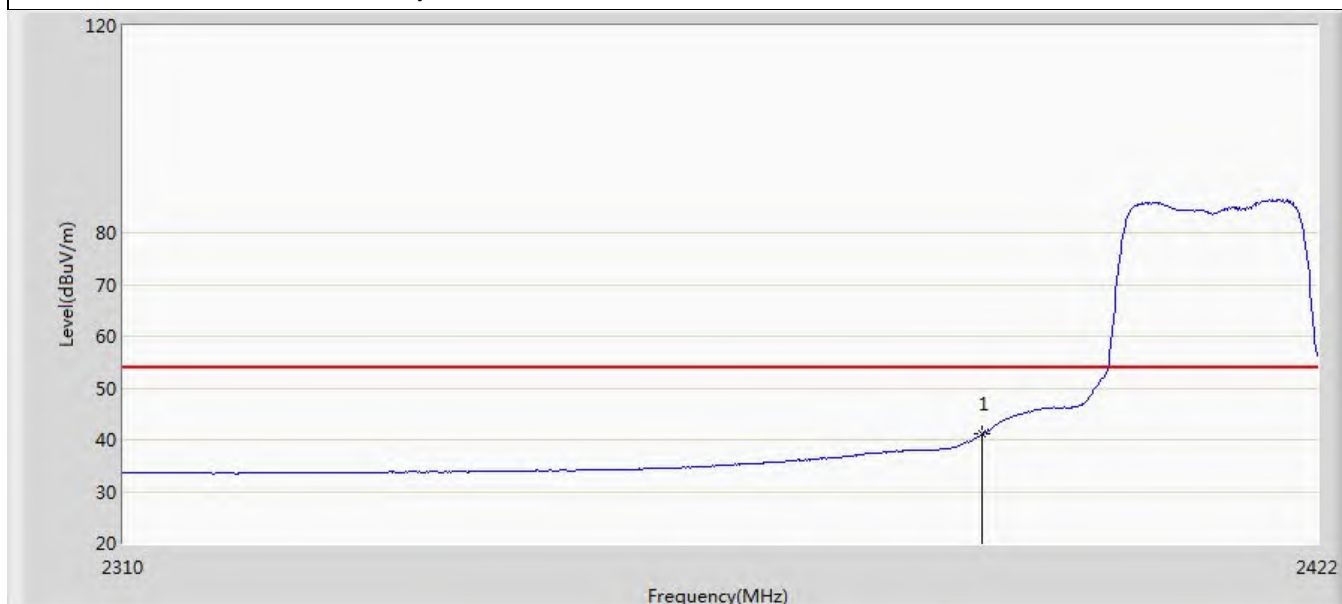
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	37.901	3.817	-16.099	54.000	34.084	AV

Profile: 22A0568R	Page No.: 19
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:24
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	56.496	22.412	-17.504	74.000	34.084	PK

Profile: 22A0568R	Page No.: 20
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2412MHz by 11n20	



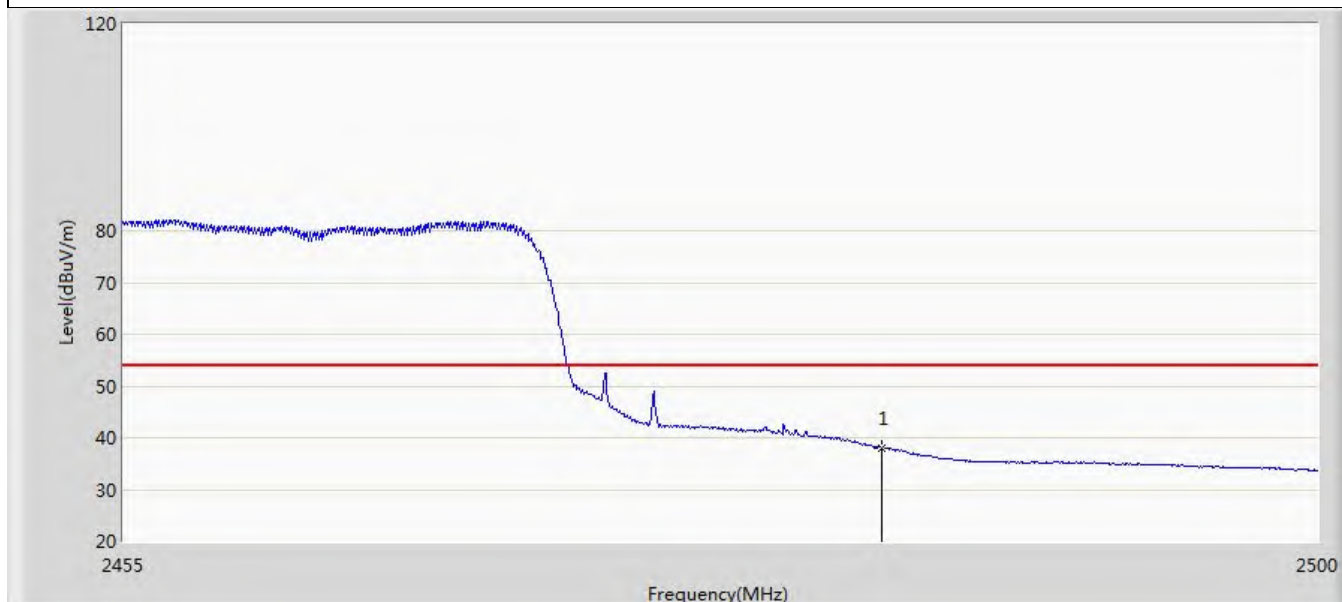
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	41.096	7.012	-12.904	54.000	34.084	AV

Profile: 22A0568R	Page No.: 21
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:27
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11n20	



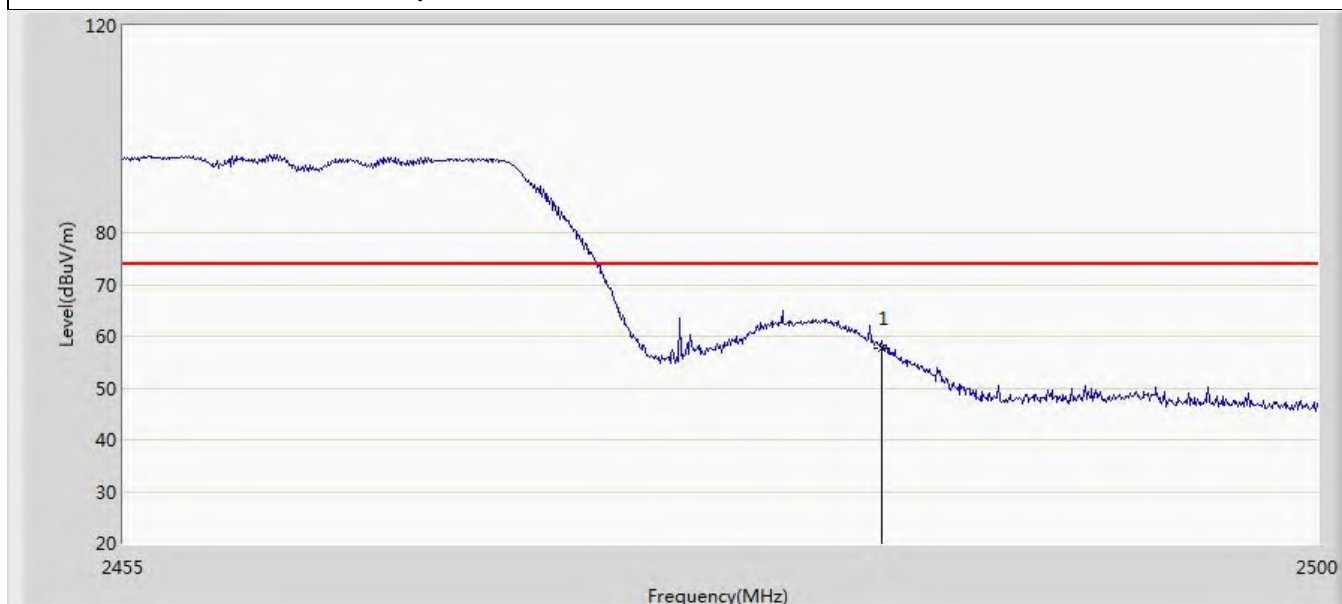
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	56.702	22.211	-17.298	74.000	34.491	PK

Profile: 22A0568R	Page No.: 22
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Horizontal
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11n20	



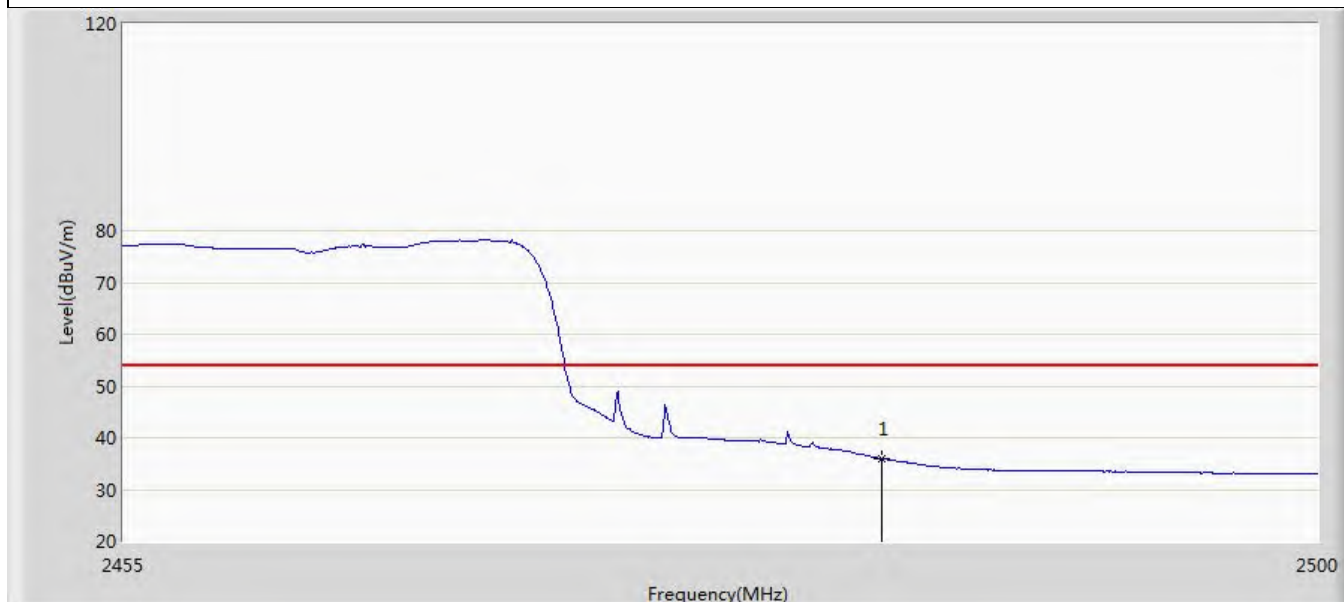
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	38.062	3.571	-15.938	54.000	34.491	AV

Profile: 22A0568R	Page No.: 23
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	57.813	23.322	-16.187	74.000	34.491	PK

Profile: 22A0568R	Page No.: 24
Engineer: Yu Liu	
Site: AC5	Time: 2022/11/20 - 23:34
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)2022	Polarity: Vertical
EUT: SC2021	Power: AC 120V/60HZ
Note: Mode1: Transmit at 2462MHz by 11n20	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	35.991	1.500	-18.009	54.000	34.491	AV

Note:

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

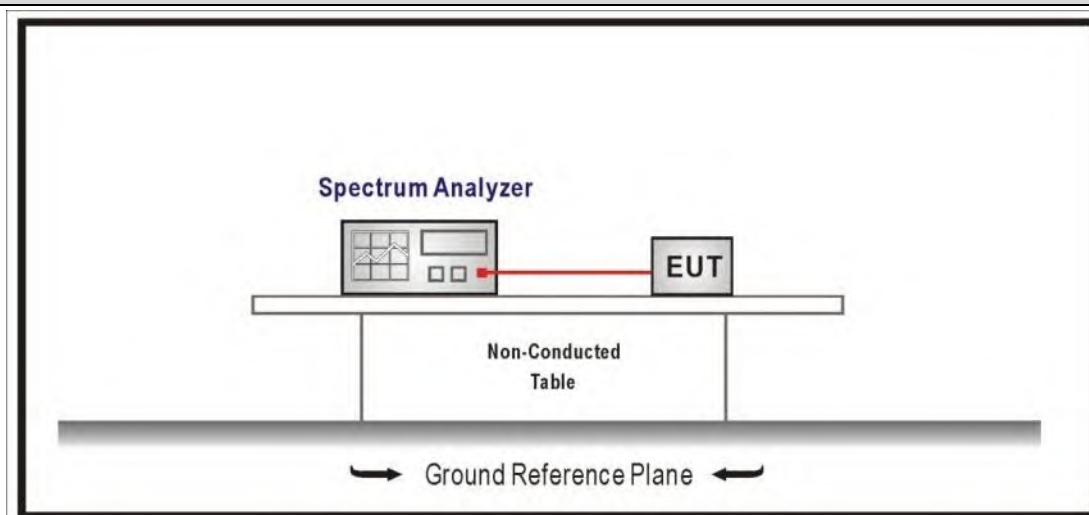
4.6 DTS Bandwidth**VERDICT: PASS****4.6.1 Limit**

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

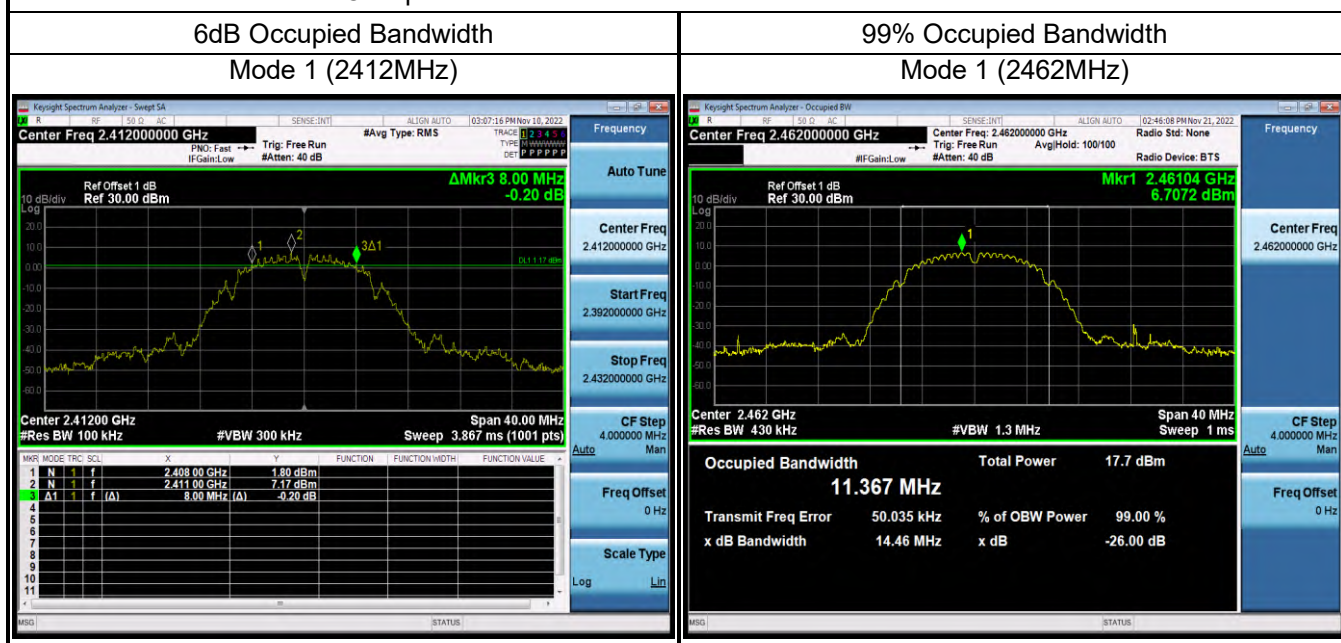
4.6.2 Test Setup**4.6.3 Test Procedure**

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

4.6.4 Test Data

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit For 6dB (kHz)	Result
1	1	2412	8.000	11.407	≥500	Pass
	6	2437	8.560	11.399	≥500	Pass
	11	2462	8.080	11.367	≥500	Pass
2	1	2412	16.320	17.433	≥500	Pass
	6	2437	16.400	17.475	≥500	Pass
	11	2462	16.320	17.365	≥500	Pass
3	1	2412	16.320	17.484	≥500	Pass
	6	2437	16.360	17.510	≥500	Pass
	11	2462	16.400	17.429	≥500	Pass

Note : 1. the worst case of Occupied Bandwidth as below :

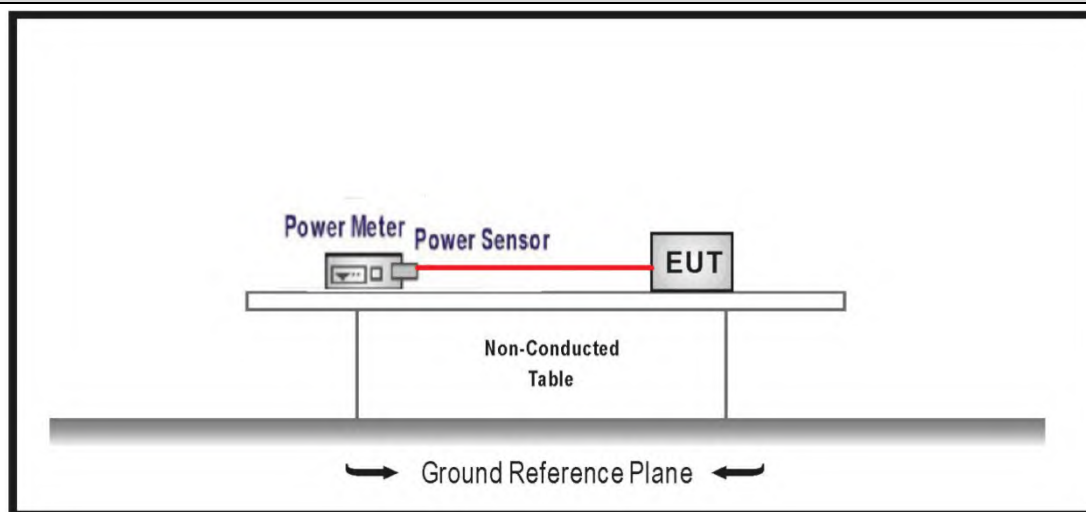


4.7 Fundamental emission output power**VERDICT: PASS****4.7.1 Limit**

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

Note 1 : GTX directional gain of transmitting antennas.

Note 2 : Pout is maximum conducted output power .

4.7.2 Test Setup

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

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Conducted Power (dBm)	EIRP (dBm)	Conducted Power Limit (dBm)	EIRP Limit (dBm)	Result
Mode 1	1	2412	17.35	19.85	≤30	≤36	Pass
	6	2437	17.91	20.41	≤30	≤36	Pass
	11	2462	17.91	20.41	≤30	≤36	Pass
Mode 2	1	2412	17.32	19.82	≤30	≤36	Pass
	6	2437	17.86	20.36	≤30	≤36	Pass
	11	2462	17.76	20.26	≤30	≤36	Pass
Mode 3	1	2412	17.39	19.89	≤30	≤36	Pass
	6	2437	17.53	20.03	≤30	≤36	Pass
	11	2462	17.93	20.43	≤30	≤36	Pass

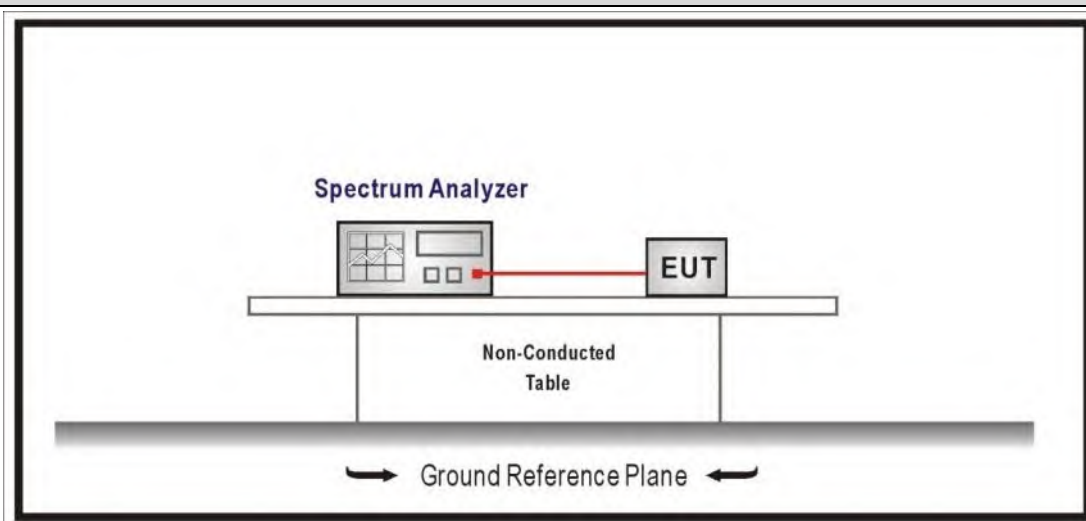
Noet: EIRP = Conducted power + antenna Gain

Power Setting:

Mode	Channel	Test Frequency (MHz)	Power Setting
Mode 1	1	2412	68
	6	2437	68
	11	2462	68
Mode 2	1	2412	68
	6	2437	68
	11	2462	68
Mode 3	1	2412	68
	6	2437	68
	11	2462	68

4.8 Power Density**VERDICT: PASS****4.8.1 Limit:****Standard**

FCC Part 15 Subpart C Paragraph 15.247 (e)

Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$ **4.8.2 Test Setup****4.8.3 Test Procedure**

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

4.8.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
1	1	2412	-7.579	≤8	Pass
	6	2437	-7.079	≤8	Pass
	11	2462	-6.977	≤8	Pass
2	1	2412	-8.968	≤8	Pass
	6	2437	-8.356	≤8	Pass
	11	2462	-10.555	≤8	Pass
3	1	2412	-9.624	≤8	Pass
	6	2437	-8.747	≤8	Pass
	11	2462	-9.837	≤8	Pass

Note :The worst case of Power Density as below in below:

Mode1 (2462MHz)



Note: We used the peak detector test result below the limit of 9db, so did not use the RMS detector.

4.9 Antenna Requirement**VERDICT: PASS****4.9.1 Limit:****Standard**

FCC Part 15 Subpart C Paragraph 15.203

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

4.9.2 Antenna Connector Construction:

- | | |
|-------------------------------------|--|
| ☒ | The use of a permanently attached antenna |
| ☐ | The antenna use of a unique coupling to the intentional radiator |
| ☐ | The use of a nonstandard antenna jack or electrical connector |

Please refer to the attached document "Internal Photograph" to show the antenna connector.

5 TEST SETUP PHOTO AND EUT PHOTO

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

_____ The End _____