FCC Test Report

Product Name	WCDMA/LTE/5G Mobile Phone
Model No	EA211001,EC211001,EC211004
FCC ID.	RYQEA211001

Applicant	FIH CO., LTD.
Address	No.4, Minsheng St., Tu-Cheng Dist., New Taipei City 23679, Taiwan

Date of Receipt	Apr 23, 2021
Issue Date	June 22, 2021
Report No.	2150419R-E3032110114
Report Version	V2.0

Testing Laboratory
3023

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
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The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test Report

Issue Date: June 22, 2021
Report No.: 2150419R-E3032110114

Product Name	WCDMA/LTE/5G Mobile Phone
Applicant	FIH CO., LTD.
Address	No.4, Minsheng St., Tu-Cheng Dist., New Taipei City 23679, Taiwan
Manufacturer	FIH CO., LTD.
Model No.	EA211001,EC211001,EC211004
FCC ID.	RYQEA211001
EUT Rated Voltage	AC 100-240V, 50-60Hz or DC 3.85V by battery
EUT Test Voltage	AC 120V / 60Hz
Trade Name	FIH
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By : Genie Chang

(Senior Adm. Specialist / Genie Chang)

Tested By : Ivan Chuang

(Senior Engineer / Ivan Chuang)

Approved By : Vincent Yeh

(Senior Engineer / Vincent Yeh)

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Revision History

Report No.	Version	Description	Issued Date
2150419R-E3032110114	V1.0	Initial issue of report.	2021-06-08
2150419R-E3032110114	V2.0	Update Product Name	2021-06-22

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	WCDMA/LTE/5G Mobile Phone
Trade Name	FIH
Model No.	EA211001,EC211001,EC211004
FCC ID.	RYQEA211001
Frequency Range	2412-2462MHz for 802.11b/g/n/ac-20BW
Number of Channels	802.11b/g/n/ac-20MHz: 11
Data Speed	802.11b: 1-11Mbps, 802.11g: 6-54Mbps, 802.11n/ac: up to 86.7Mbps
Channel separation	802.11b/g/n/ac: 5 MHz
Type of Modulation	802.11b:DSSS (DBPSK, DQPSK, CCK) 802.11g/n/ac:OFDM (BPSK, QPSK, 16QAM, 64QAM)
Antenna Type	Loop Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
USB Cable	Shielded, 1m
Power Adapter	MFR: CHEN YANG, M/N: CK18W02U Input: AC 100-240V, 50-60Hz, 0.5A Output: 5V⎓3A or 9V⎓2A or 12V⎓1.5A

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Tongda	MEFLC61001A/MEFLC61004A	Loop Antenna	-4.7dBi for 2.4GHz

Note: The antenna of EUT is conforming to FCC 15.203.

802.11b/g/n/ac-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11n-40MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 03:	2422 MHz	Channel 04:	2427 MHz	Channel 05:	2432 MHz	Channel 06:	2437 MHz
Channel 07:	2442 MHz	Channel 08:	2447 MHz	Channel 09:	2452 MHz		

Note:

1. The EUT is a WCDMA/LTE/5G Mobile Phone with a built-in 2.4 GHz、5 GHz WLAN、Bluetooth V5.1, V3.0, V2.1+EDR、NFC and WWAN transceiver, this report for 2.4GHz WLAN.
2. It's declared by manufacture about all models are electrically identical, different model names for marketing purpose. The identification of test sample is EA211001.
3. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
4. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
5. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report.
6. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11b/g/n/ac transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)

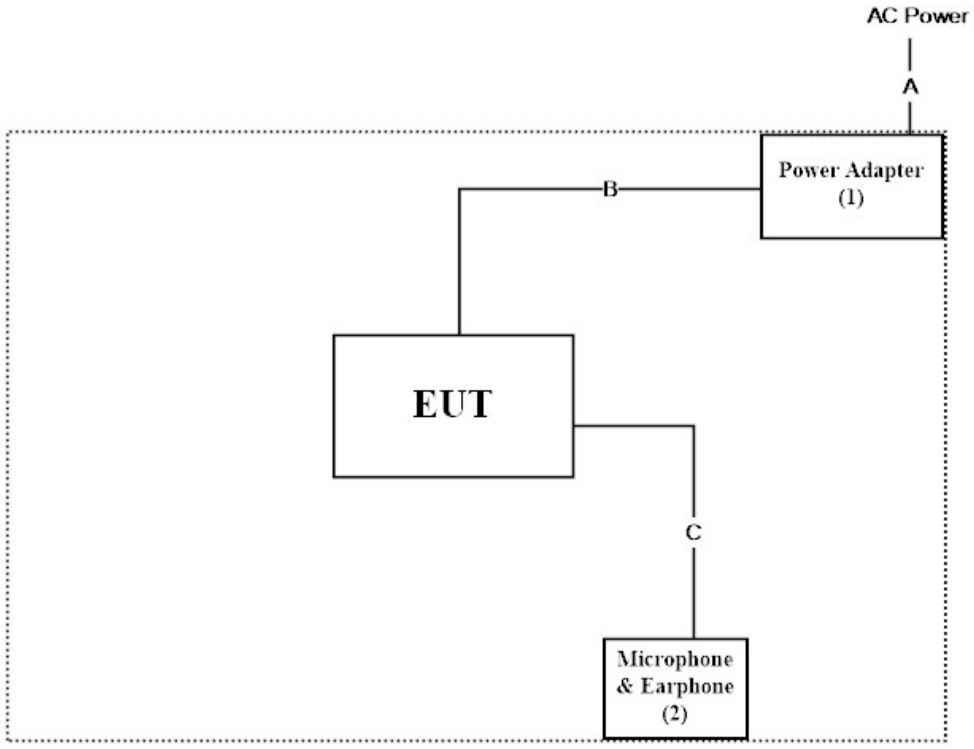
1.2. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Power Adapter	CHEN YANG	CK18W02U	N/A	N/A
2	Microphone & Earphone	Ergotech	ET-E201	N/A	N/A

Signal Cable Type		Signal cable Description
A	Power Cable	Non-shielded, 1.8m
B	USB Cable	Shielded, 1m
C	Audio Cable	Non-shielded, 1.2m

1.3. Configuration of Tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.3.
2. Execute software “Engineer Mode v2021-04-16-122001” on the EUT.
3. Configure the test mode, the test channel, and the data rate.
4. Press “OK” to start the continuous Transmit.
5. Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	23.5 °C
	Humidity (%RH)	10~90 %	60.1 %
Radiated Emission	Temperature (°C)	10~40 °C	31.6 °C
	Humidity (%RH)	10~90 %	66.2 %
Conductive	Temperature (°C)	10~40 °C	23.4 °C
	Humidity (%RH)	10~90 %	59.8 %

USA : FCC Registration Number: TW0033
Canada : IC Registration Number: 26930

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City
Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
Email address : info.tw@dekra.com
Website : http://www.dekra.com.tw

1.6. List of Test Item and Equipment

For Conduction measurements / ASR1-1

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	EMI Test Receiver	R&S	ESR7	101601	2021.01.04	2022.01.03
X	Two-Line V-Network	R&S	ENV216	101306	2021.04.08	2022.04.07
X	Two-Line V-Network	R&S	ENV216	101307	2021.05.04	2022.05.03
X	Coaxial Cable	DEKRA	RG400_BNC	RF001	2021.05.24	2022.05.23

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version : DEKRA Testing System V2.0.

For Conducted measurements /AC2

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Spectrum Analyzer	Keysight	N9030B	MY56320509	2020.08.10	2021.08.09
X	Power Meter	Anritsu	ML2496A	1548003	2020.12.21	2021.12.20
X	Power Sensor	Anritsu	MA2411B	1531024	2020.12.21	2021.12.20
X	Power Sensor	Anritsu	MA2411B	1531025	2020.12.21	2021.12.20

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version : DEKRA Conduction Test System V9.0.5.

For Radiated measurements /AC2

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
X	Loop Antenna	AMETEK	HLA6121	56736	2021.04.14	2022.04.13
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-953	2021.01.29	2022.01.28
X	Horn Antenna	ETS-Lindgren	3117	00203799	2020.12.22	2021.12.21
X	Horn Antenna	Com-Power	AH-840	101101	2020.11.19	2021.11.18
X	Pre-Amplifier	EMCI	EMC001330	980302	2020.07.08	2021.07.07
X	Pre-Amplifier	EMCI	EMC051835SE	980312	2020.06.10	2021.06.09
X	Pre-Amplifier	EMCI	EMC05820SE	980361	2020.12.21	2021.12.20
X	Pre-Amplifier	EMCI	EMC184045SE	980369	2021.04.27	2022.04.26
X	Filter	MICRO TRONICS	BRM50702	G251	2020.09.17	2021.09.16
X	Filter	MICRO TRONICS	BRM50716	G188	2020.09.17	2021.09.16
X	EMI Test Receiver	R&S	ESR	102793	2020.12.17	2021.12.16
X	Spectrum Analyzer	R&S	FSV3044	101114	2021.02.04	2022.02.03
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF003	2021.03.03	2022.03.02
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2020.06.10	2021.06.09

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with “X” are used to measure the final test results.
3. Test Software version : DEKRA Testing System V2.0.

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document, and is described in each test chapter of this report.

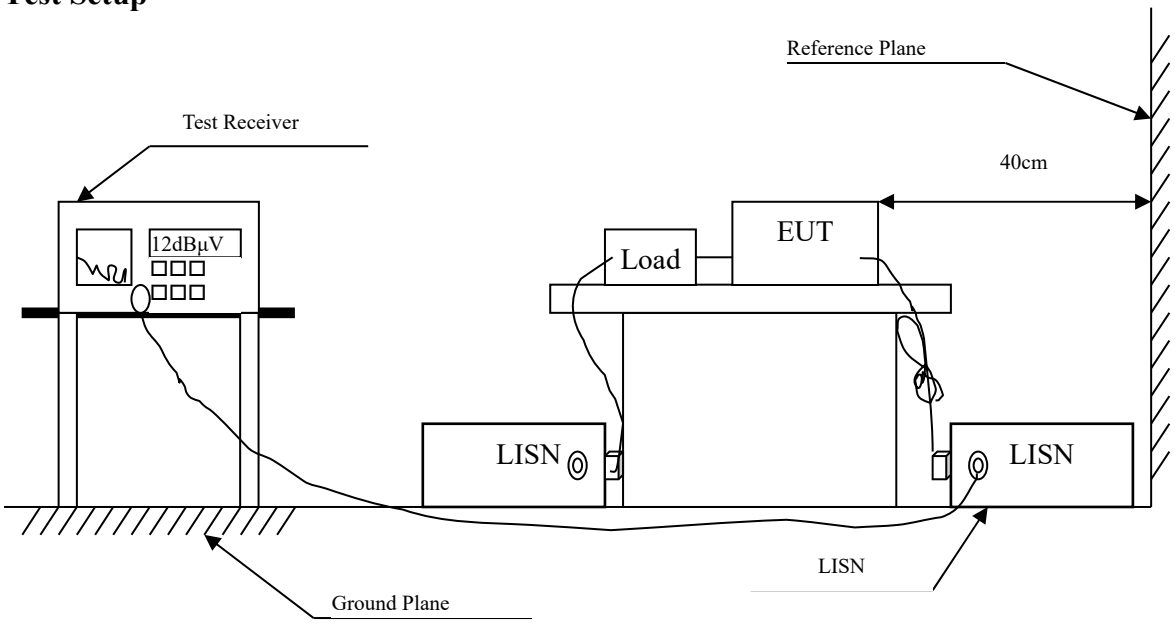
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test item	**Uncertainty**	
Conducted Emission	±3.42dB	
Peak Power Output	Power Meter ±0.89dB	Spectrum Analyzer ±2.06dB
Radiated Emission	Under 1GHz ±4.05 dB	Above 1GHz ±3.73 dB
RF antenna conducted test	±2.06dB	
Band Edge	Under 1GHz ±4.05 dB	Above 1GHz ±3.73 dB
6dB Bandwidth	±1544.74Hz	
Power Density	±2.06dB	
Duty Cycle	±2.31msec	

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

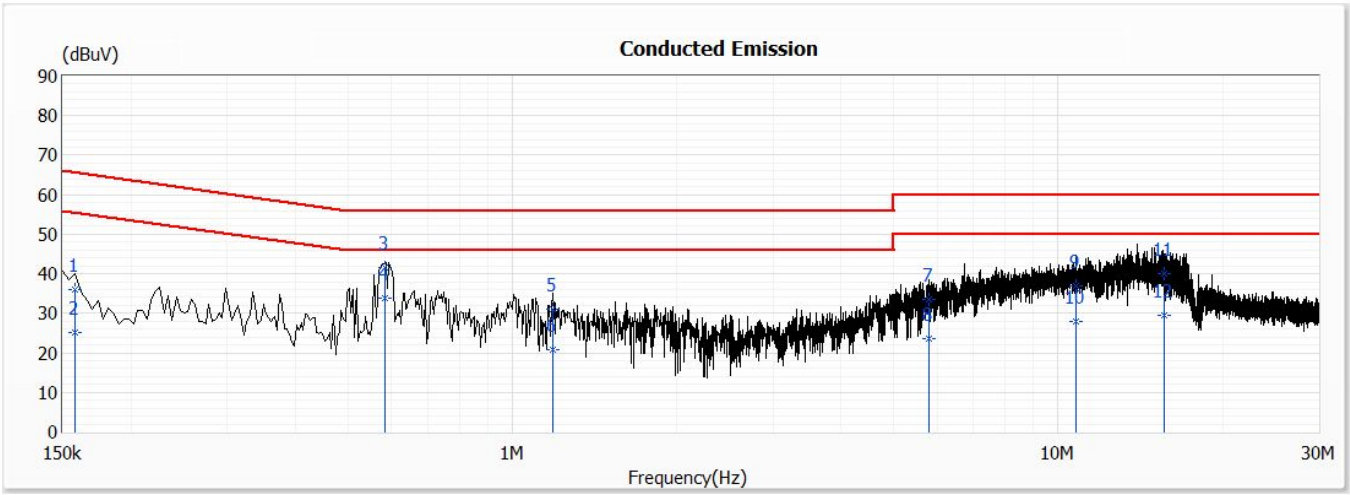
2.3. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.4. Test Result of Conducted Emission

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Conducted Emission Test
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2437MHz)
Test Date : 2021/06/08

Line1



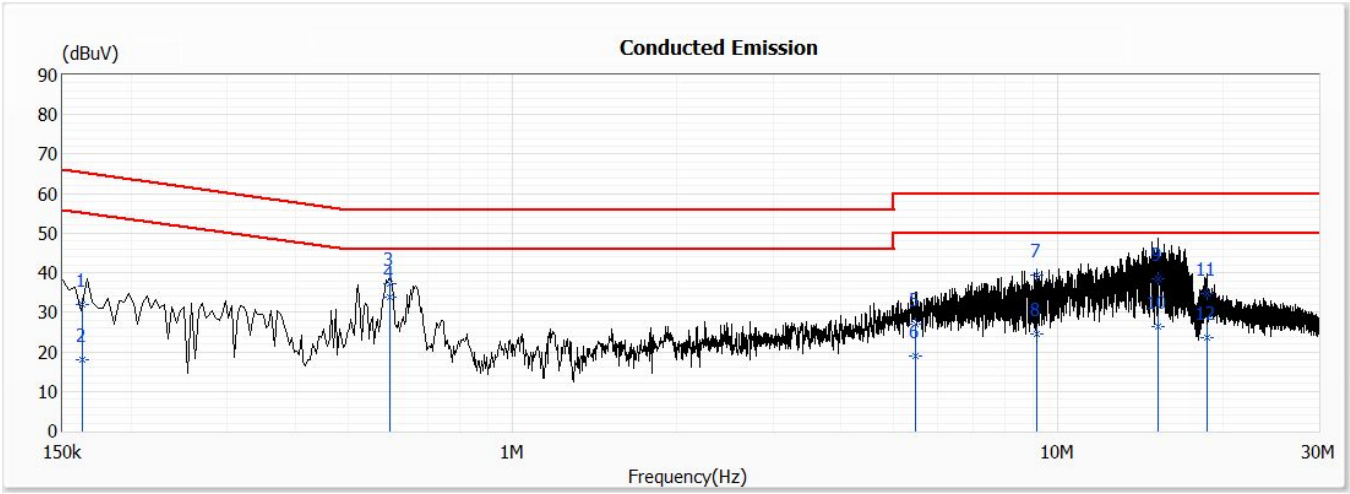
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.158	36.02	65.55	-29.53	26.36	9.66	QP
2	0.158	25.21	55.55	-30.34	15.55	9.66	AV
3	0.583	41.66	56.00	-14.34	32.00	9.66	QP
*4	0.583	33.82	46.00	-12.18	24.16	9.66	AV
5	1.183	31.17	56.00	-24.83	21.47	9.70	QP
6	1.183	20.85	46.00	-25.15	11.15	9.70	AV
7	5.796	33.48	60.00	-26.52	23.67	9.81	QP
8	5.796	23.74	50.00	-26.26	13.93	9.81	AV
9	10.786	36.85	60.00	-23.15	26.95	9.90	QP
10	10.786	27.99	50.00	-22.01	18.09	9.90	AV
11	15.602	40.01	60.00	-19.99	30.07	9.94	QP
12	15.602	29.36	50.00	-20.64	19.42	9.94	AV

Remark:

1. "*" means this data is the worst emission level;"!" means this data is over limit.
2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).
3. Margin=Emission Level-Limit

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Conducted Emission Test
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2437MHz)
Test Date	:	2021/06/08

N



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.163	31.89	65.30	-33.41	22.22	9.67	QP
2	0.163	18.03	55.30	-37.27	8.36	9.67	AV
3	0.595	37.38	56.00	-18.62	27.71	9.67	QP
*4	0.595	33.72	46.00	-12.28	24.05	9.67	AV
5	5.475	27.05	60.00	-32.95	17.24	9.81	QP
6	5.475	19.05	50.00	-30.95	9.24	9.81	AV
7	9.120	39.53	60.00	-20.47	29.64	9.89	QP
8	9.120	24.47	50.00	-25.53	14.58	9.89	AV
9	15.225	38.36	60.00	-21.64	28.36	10.00	QP
10	15.225	26.27	50.00	-23.73	16.27	10.00	AV
11	18.759	34.80	60.00	-25.20	24.77	10.03	QP
12	18.759	23.74	50.00	-26.26	13.71	10.03	AV

Remark:

1. "*" means this data is the worst emission level;"!" means this data is over limit.

2. Emission Level=Reading Level + Correct Factor(Correct Factor=LISN Factor+Cable Loss).

3. Margin=Emission Level-Limit

3. Peak Power Output

3.1. Test Setup

3.2. Limits

The maximum peak power shall be less 1 Watt.

3.3. Test Procedure

The EUT was tested according to C63.10:2013 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using C63.10:2013 Section 11.9.1.3 PKPM1 Peak power meter method. The maximum average conducted output power using C63.10:2013 Section 11.9.2.3 Measurement using a power meter (PM). (Measurement using a gated RF average-reading power meter).

3.4. Test Result of Peak Power Output

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Peak Power Output Data
Test Mode : Mode 1: Transmit (802.11b 1Mbps)
Test Date : 2020/06/10

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	16.75	--	--	--	19.12	<30dBm	Pass
06	2437	16.87	16.81	16.75	16.72	19.02	<30dBm	Pass
11	2462	16.61	--	--	--	18.82	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Peak Power Output Data
Test Mode : Mode 2: Transmit (802.11g 6Mbps)
Test Date : 2020/06/10

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	16.74	--	--	--	--	--	--	--	23.22	<30dBm	Pass
06	2437	16.73	16.67	16.61	16.57	16.52	16.45	16.41	16.36	23.18	<30dBm	Pass
11	2462	15.88	--	--	--	--	--	--	--	22.75	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Peak Power Output Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)
Test Date : 2020/06/10

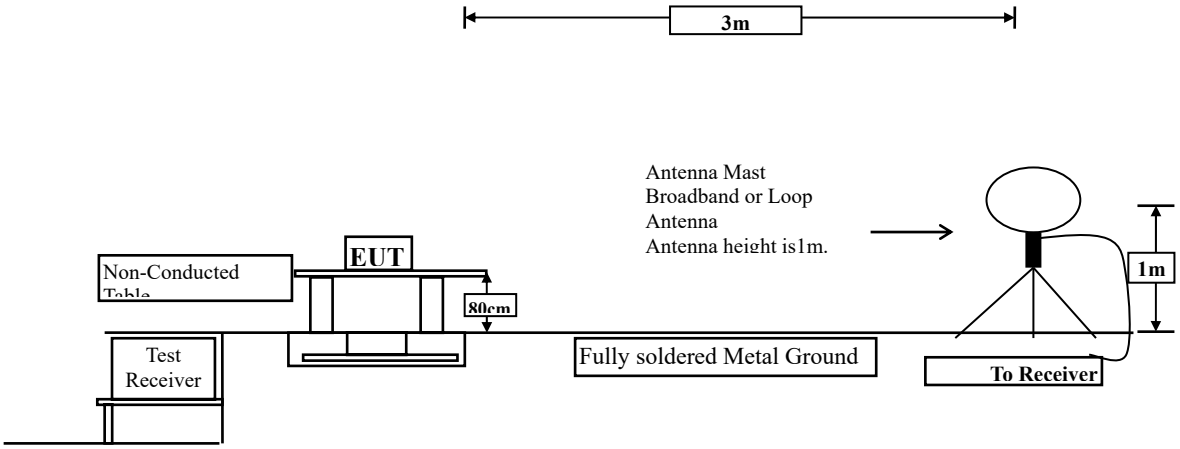
Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		7.2	14.4	21.7	28.9	43.3	57.8	65	86.7	7.2		
		Measurement Level (dBm)										
01	2412	16.65	--	--	--	--	--	--	--	23.25	<30dBm	Pass
06	2437	16.64	16.6	16.57	16.51	16.46	16.39	16.34	16.29	23.23	<30dBm	Pass
11	2462	15.81	--	--	--	--	--	--	--	22.79	<30dBm	Pass

Note: Peak Power Output Value =Reading value on power meter + cable loss

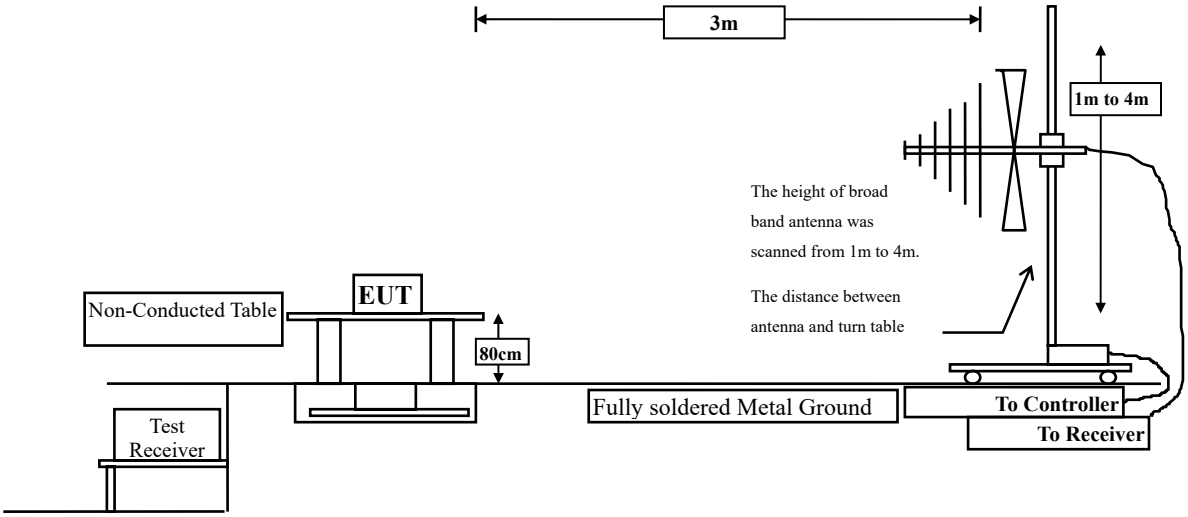
4. Radiated Emission

4.1. Test Setup

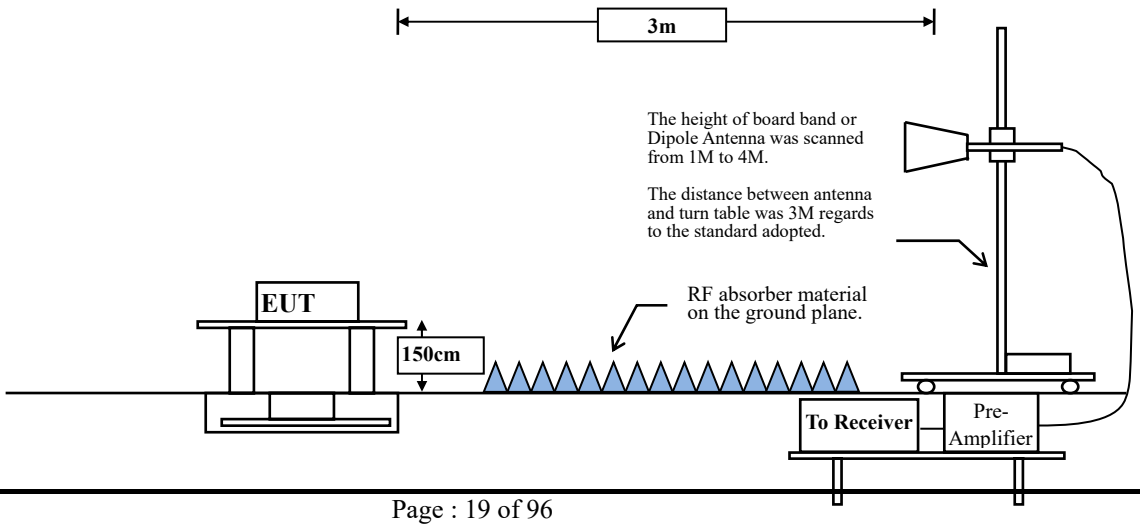
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. Limits

➢ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to C63.10:2013 Section 11.12.1 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

VBW ≥ 3 x RBW.

Table 1 —RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to C63.10 Section 11.12.2.5 Average measurement procedure.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to 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.)

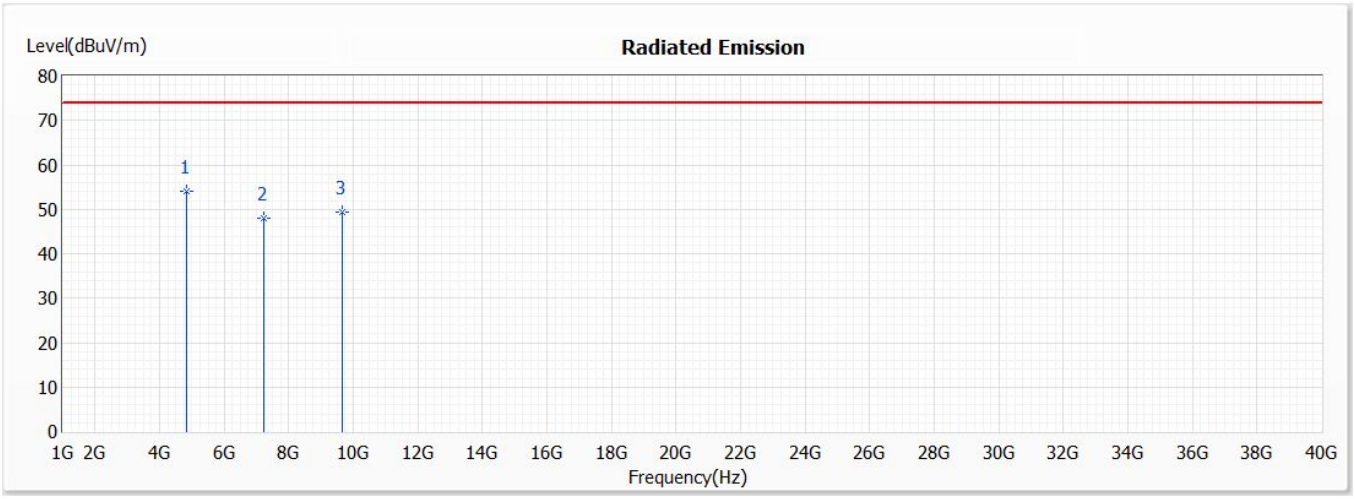
2.4GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11b	99.57	8.3880	119	10
802.11g	97.20	1.3880	720	1000
802.11ac20	97.49	1.3138	761	1000

Note: Duty Cycle Refer to Section 9.

4.4. Test Result of Radiated Emission

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/25

Horizontal



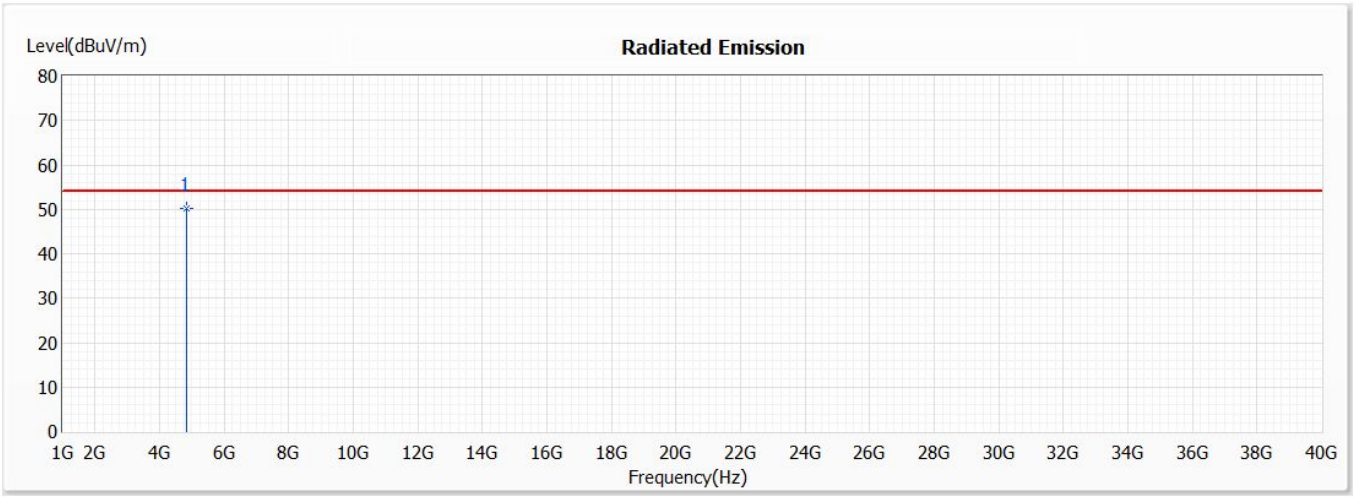
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	54.15	74.00	-19.85	55.70	-1.55	PK
2	7236.000	47.95	74.00	-26.05	45.02	2.93	PK
3	9648.000	49.49	74.00	-24.51	44.47	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/25

Horizontal



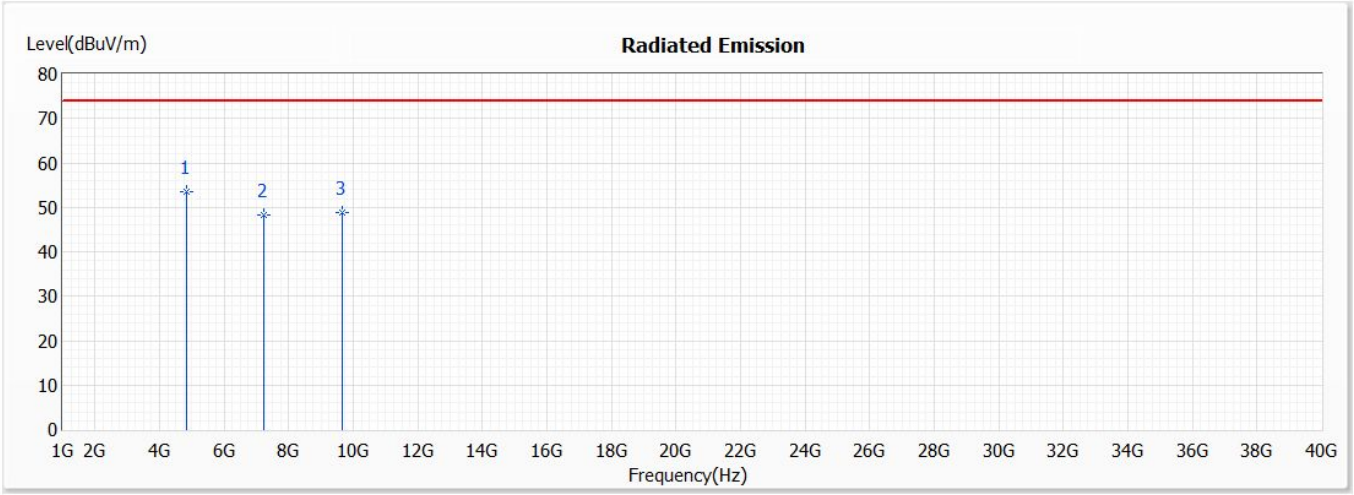
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	50.29	54.00	-3.71	51.84	-1.55	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/25

Vertical



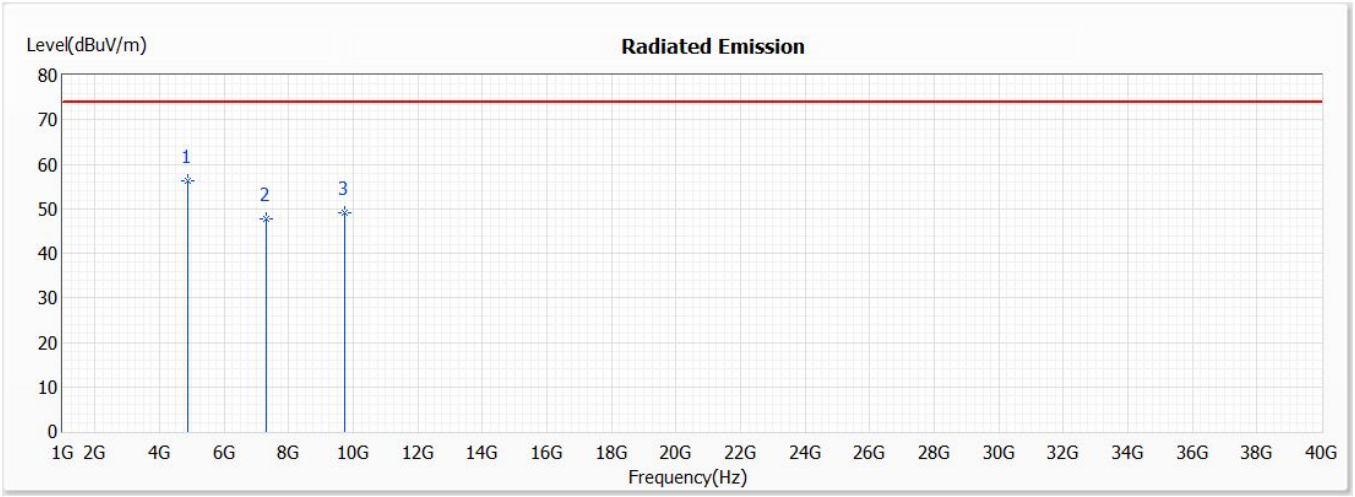
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	53.47	74.00	-20.53	55.02	-1.55	PK
2	7236.000	48.25	74.00	-25.75	45.32	2.93	PK
3	9648.000	48.77	74.00	-25.23	43.75	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)
Test Date	:	2021/05/25

Horizontal



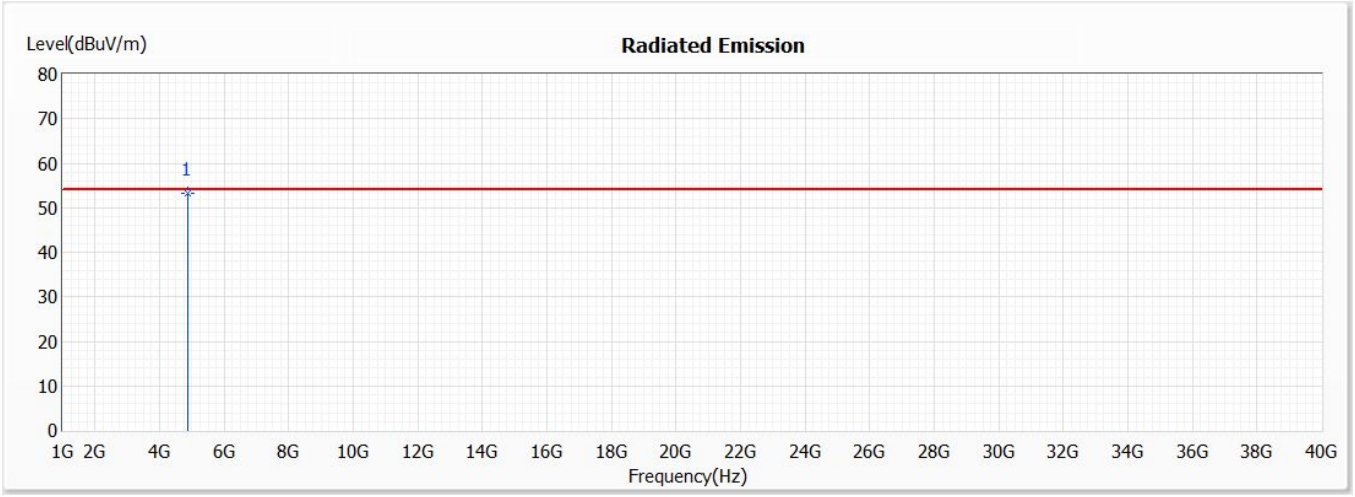
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	56.22	74.00	-17.78	57.72	-1.50	PK
2	7311.000	47.64	74.00	-26.36	44.69	2.95	PK
3	9748.000	49.12	74.00	-24.88	43.88	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)
Test Date	:	2021/05/25

Horizontal



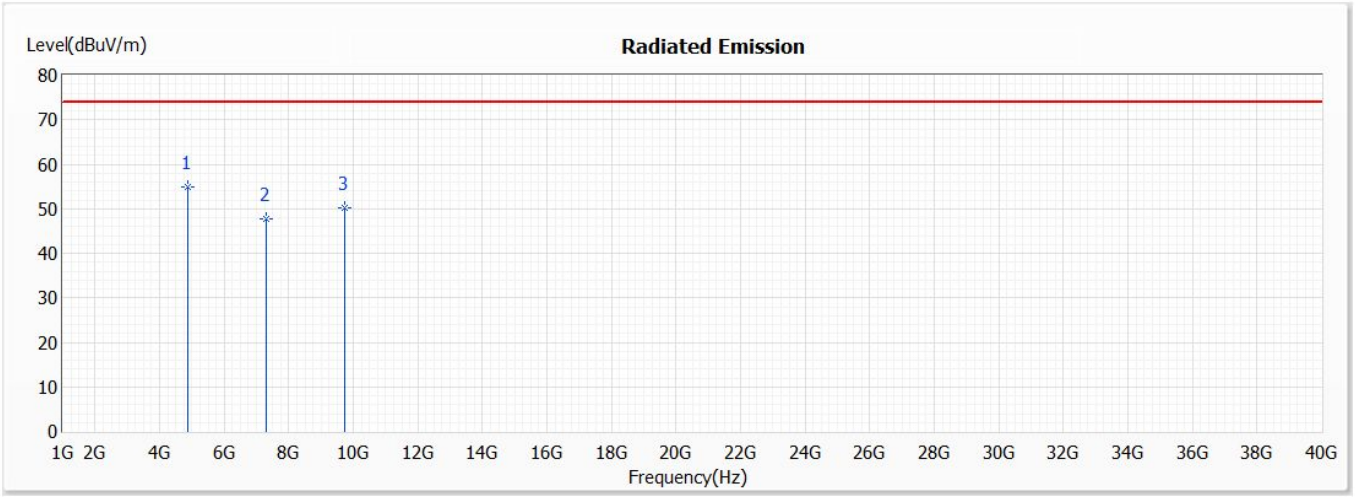
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	53.20	54.00	-0.80	54.70	-1.50	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)
Test Date	:	2021/05/25

Vertical



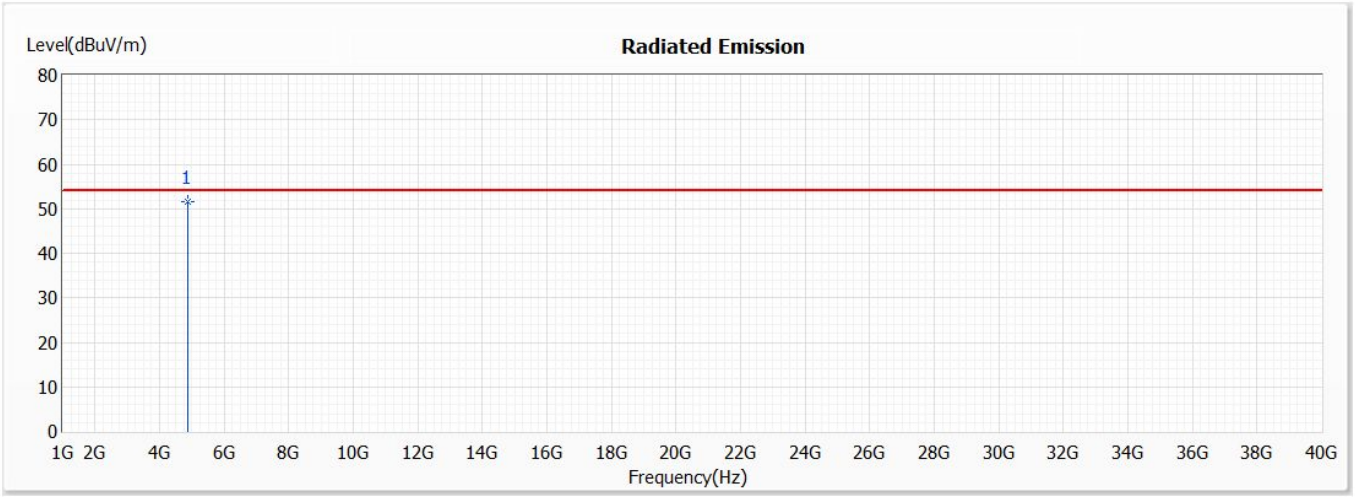
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	54.85	74.00	-19.15	56.35	-1.50	PK
2	7311.000	47.73	74.00	-26.27	44.78	2.95	PK
3	9748.000	50.26	74.00	-23.74	45.02	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)
Test Date	:	2021/05/25

Vertical



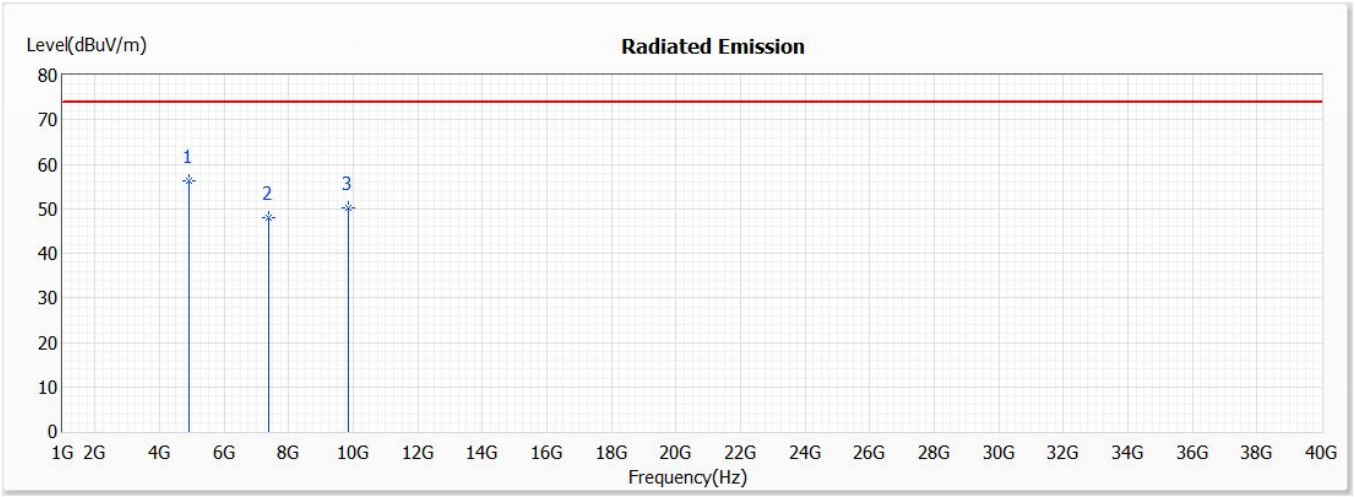
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	51.64	54.00	-2.36	53.14	-1.50	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)
Test Date	:	2021/05/25

Horizontal



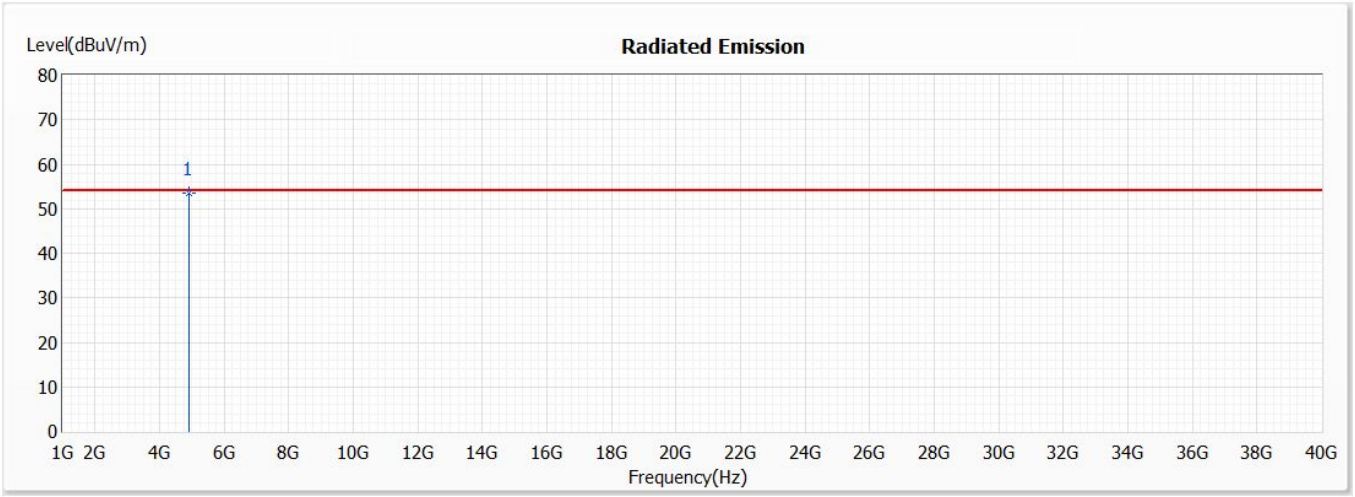
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	56.26	74.00	-17.74	57.58	-1.32	PK
2	7386.000	48.04	74.00	-25.96	45.04	3.00	PK
3	9848.000	50.24	74.00	-23.76	44.87	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)
Test Date	:	2021/05/25

Horizontal



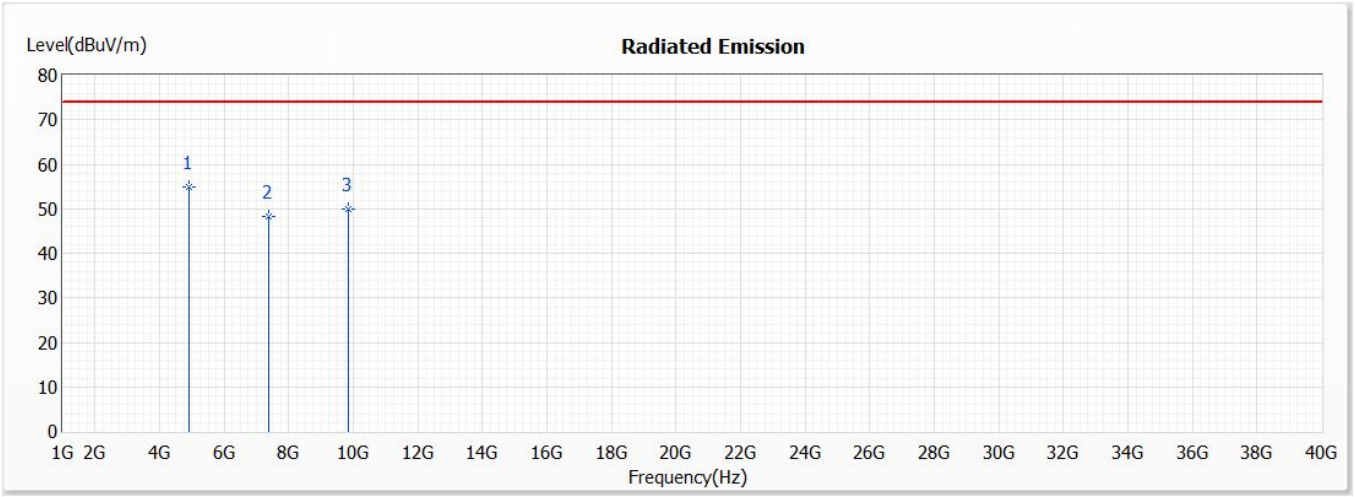
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	53.42	54.00	-0.58	54.74	-1.32	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)
Test Date	:	2021/05/25

Vertical



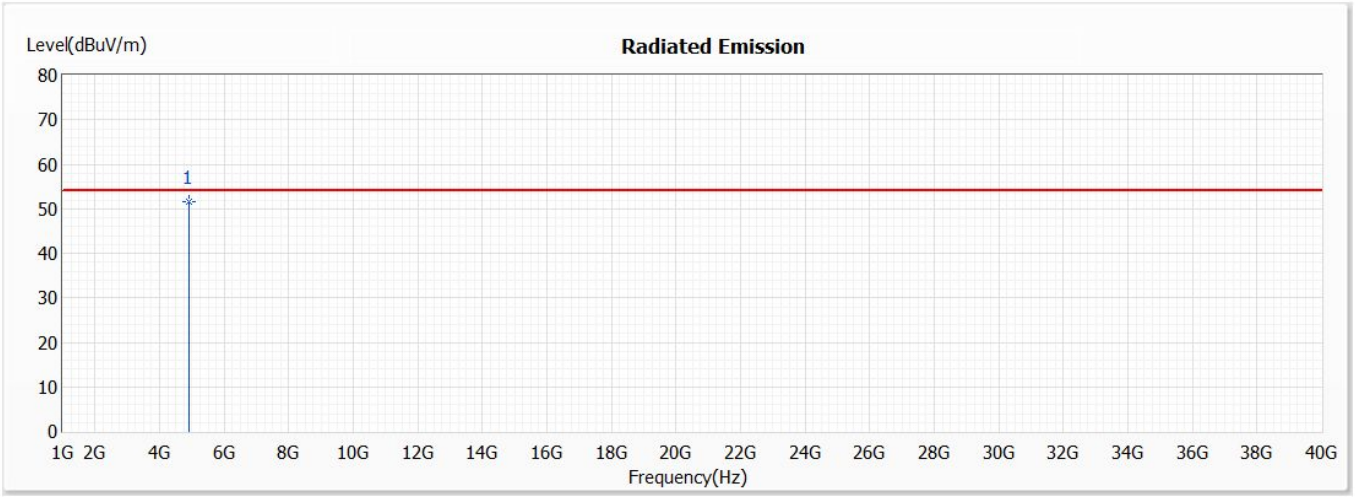
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	54.85	74.00	-19.15	56.17	-1.32	PK
2	7386.000	48.26	74.00	-25.74	45.26	3.00	PK
3	9848.000	49.95	74.00	-24.05	44.58	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)
Test Date	:	2021/05/25

Vertical



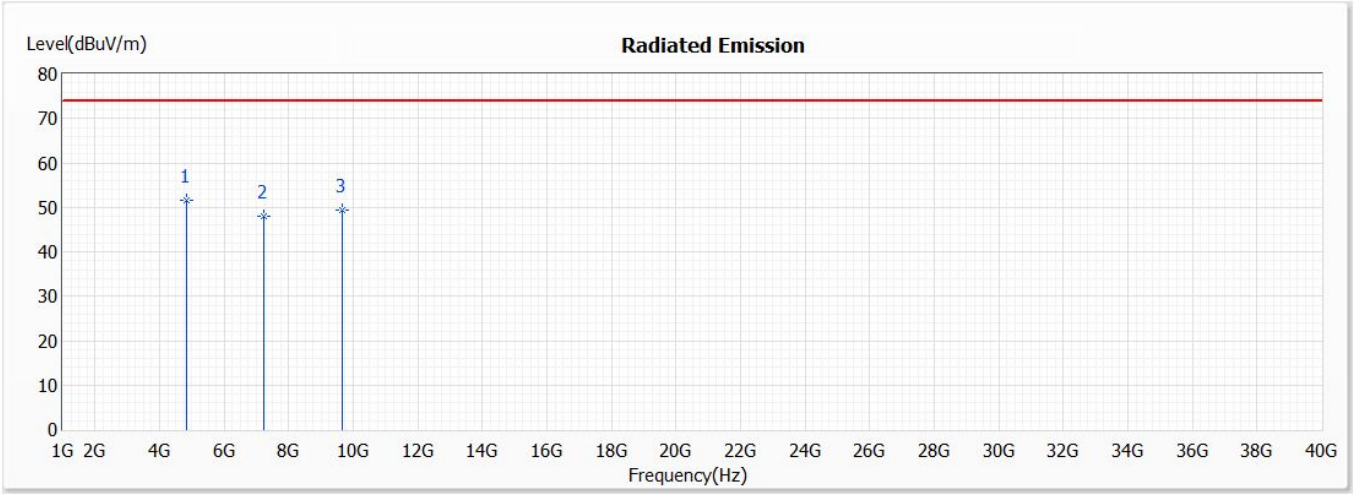
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	51.50	54.00	-2.50	52.82	-1.32	AV

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date	:	2021/05/25

Horizontal



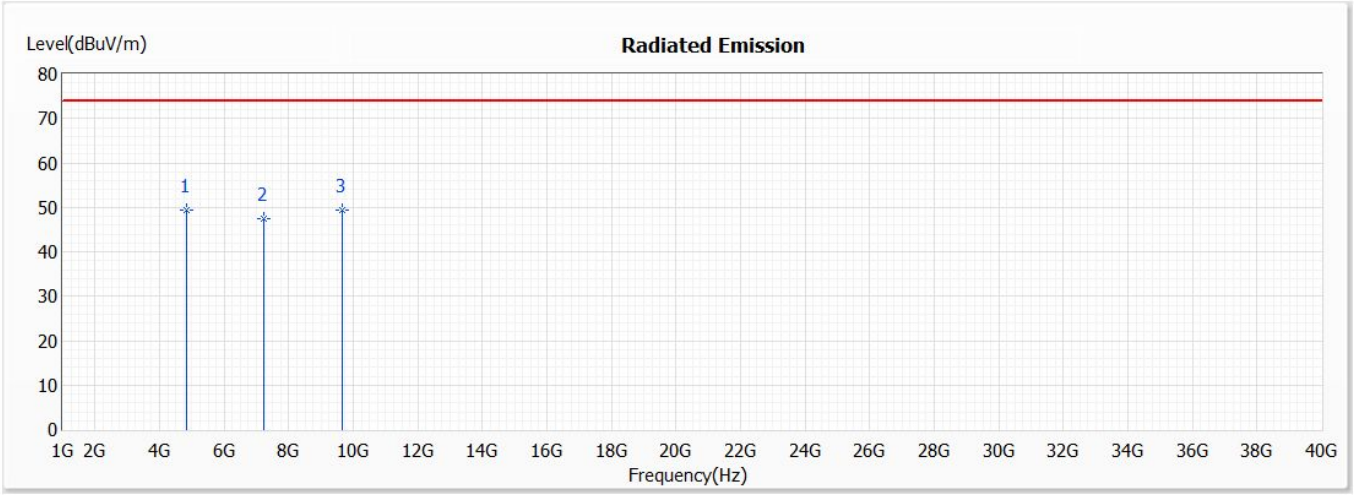
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	51.56	74.00	-22.44	53.11	-1.55	PK
2	7236.000	47.99	74.00	-26.01	45.06	2.93	PK
3	9648.000	49.34	74.00	-24.66	44.32	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date	:	2021/05/25

Vertical



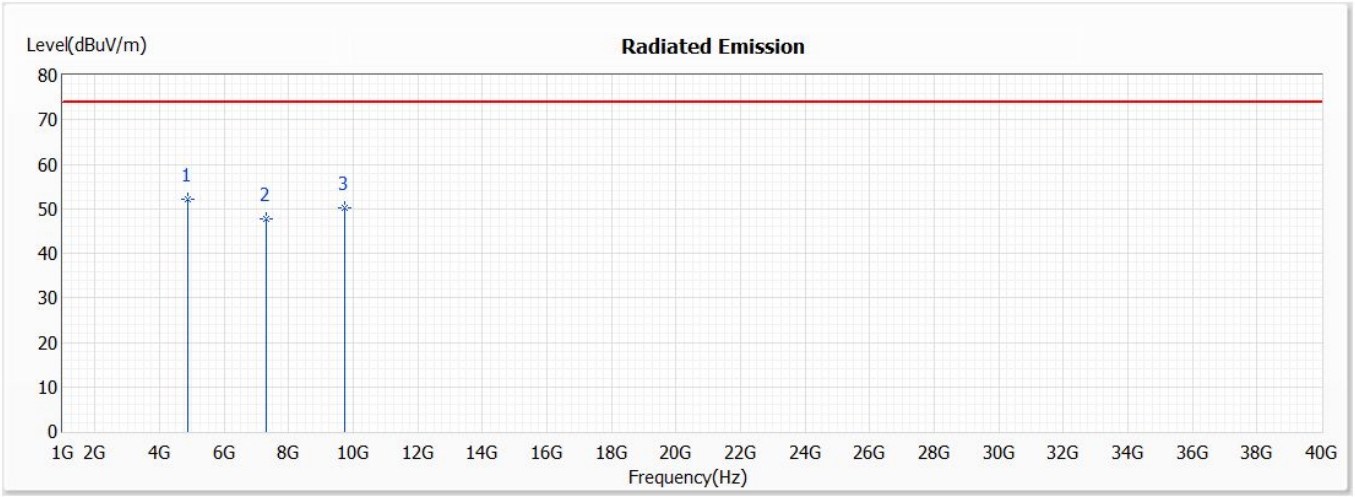
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	49.36	74.00	-24.64	50.91	-1.55	PK
2	7236.000	47.44	74.00	-26.56	44.51	2.93	PK
3	9648.000	49.27	74.00	-24.73	44.25	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)
Test Date	:	2021/05/25

Horizontal



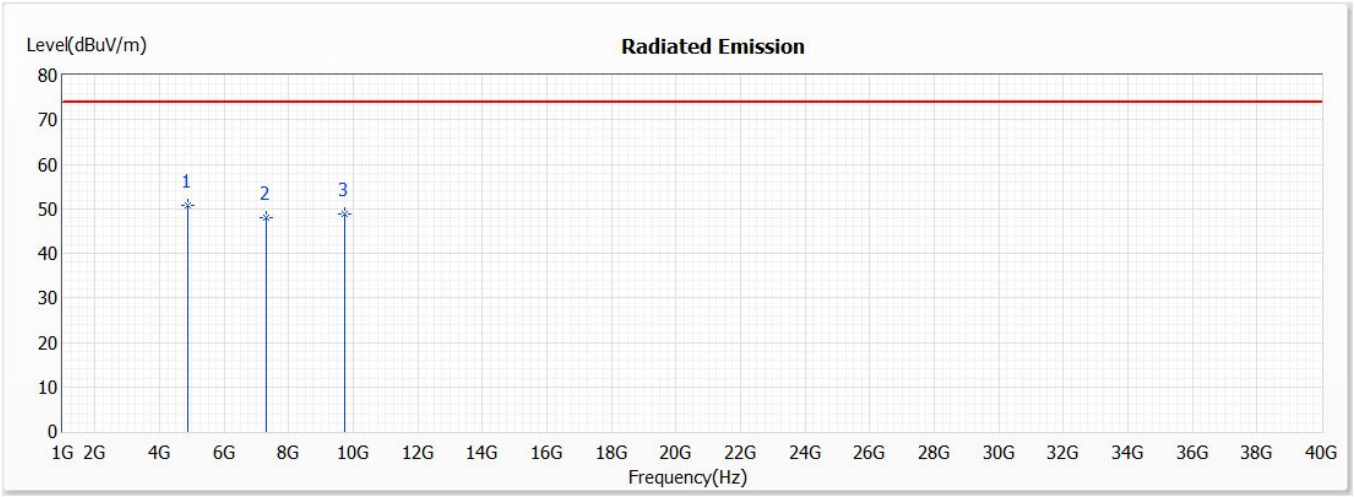
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	52.25	74.00	-21.75	53.75	-1.50	PK
2	7311.000	47.63	74.00	-26.37	44.68	2.95	PK
3	9748.000	50.15	74.00	-23.85	44.91	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)
Test Date	:	2021/05/25

Vertical



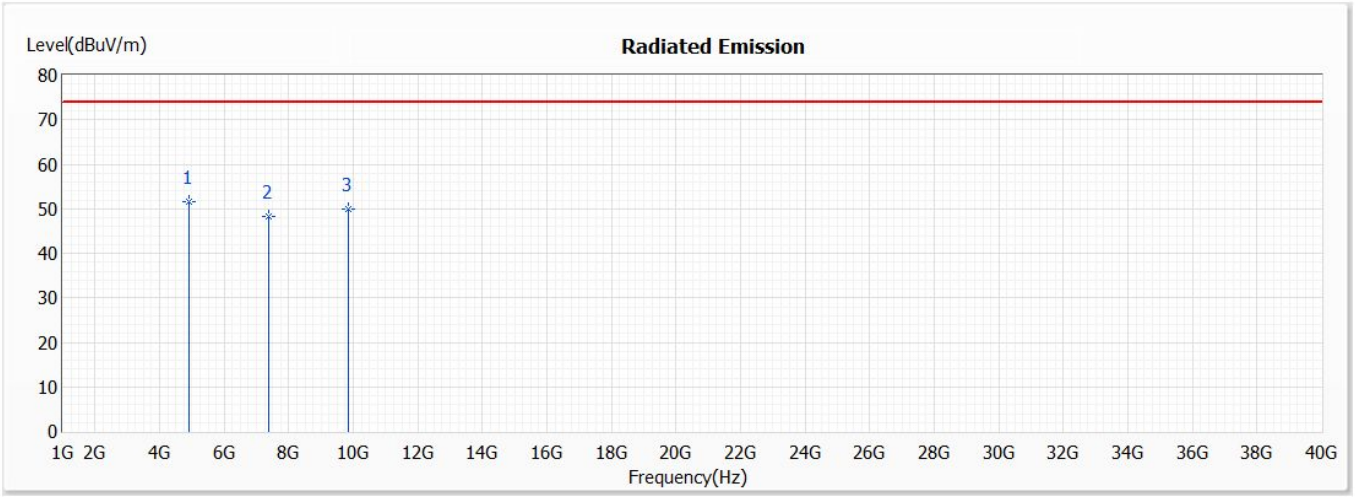
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	50.84	74.00	-23.16	52.34	-1.50	PK
2	7311.000	48.02	74.00	-25.98	45.07	2.95	PK
3	9748.000	48.84	74.00	-25.16	43.60	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)
Test Date	:	2021/05/25

Horizontal



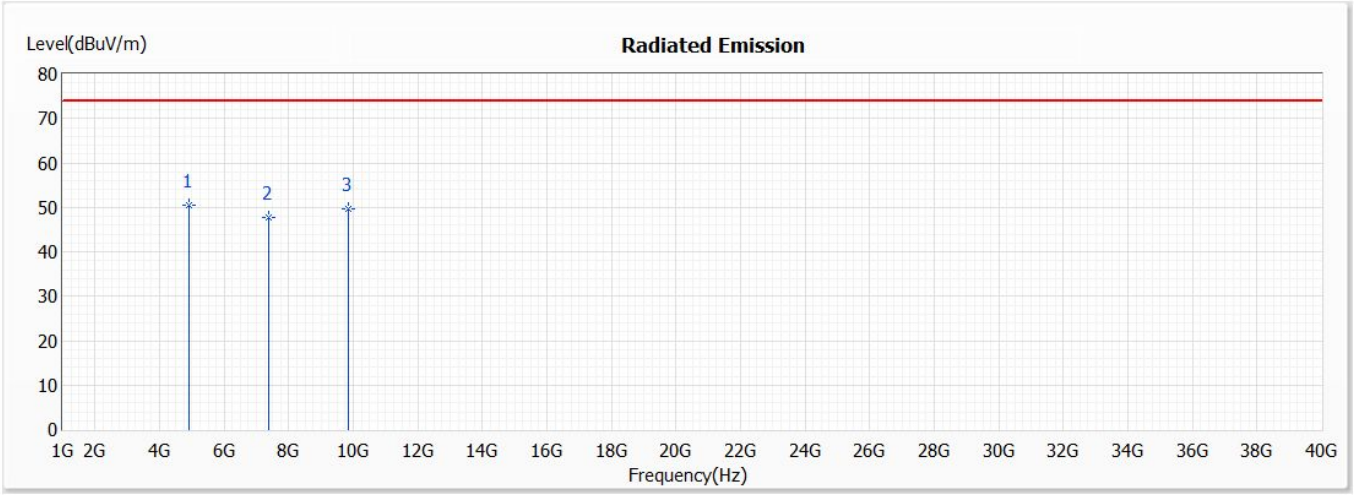
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	51.46	74.00	-22.54	52.78	-1.32	PK
2	7386.000	48.37	74.00	-25.63	45.37	3.00	PK
3	9848.000	49.90	74.00	-24.10	44.53	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)
Test Date	:	2021/05/25

Vertical



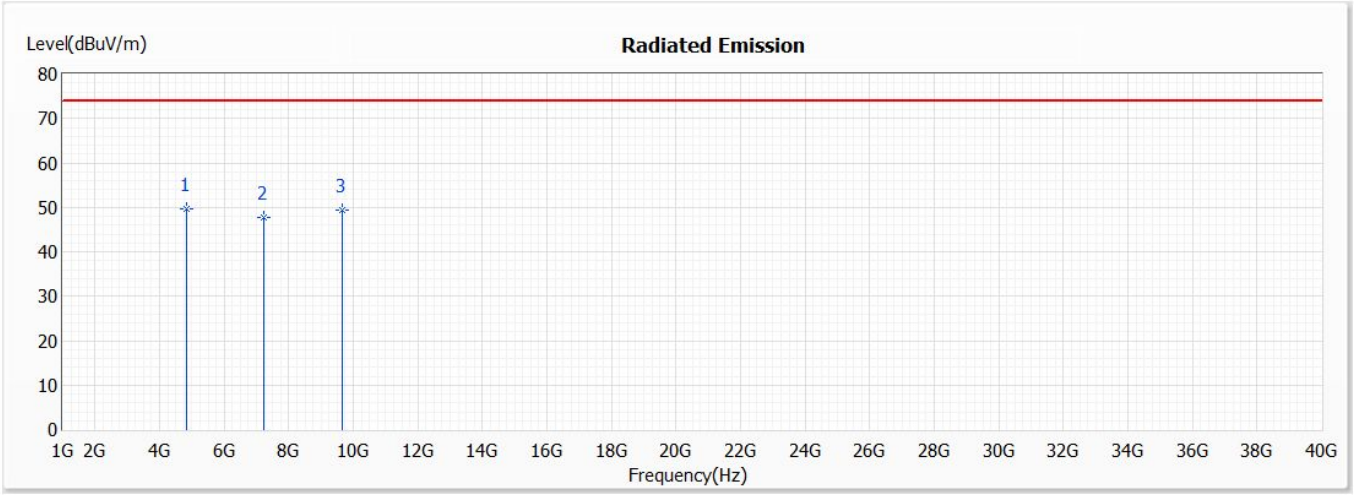
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4924.000	50.36	74.00	-23.64	51.68	-1.32	PK
2	7386.000	47.85	74.00	-26.15	44.85	3.00	PK
3	9848.000	49.75	74.00	-24.25	44.38	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date	:	2021/05/25

Horizontal



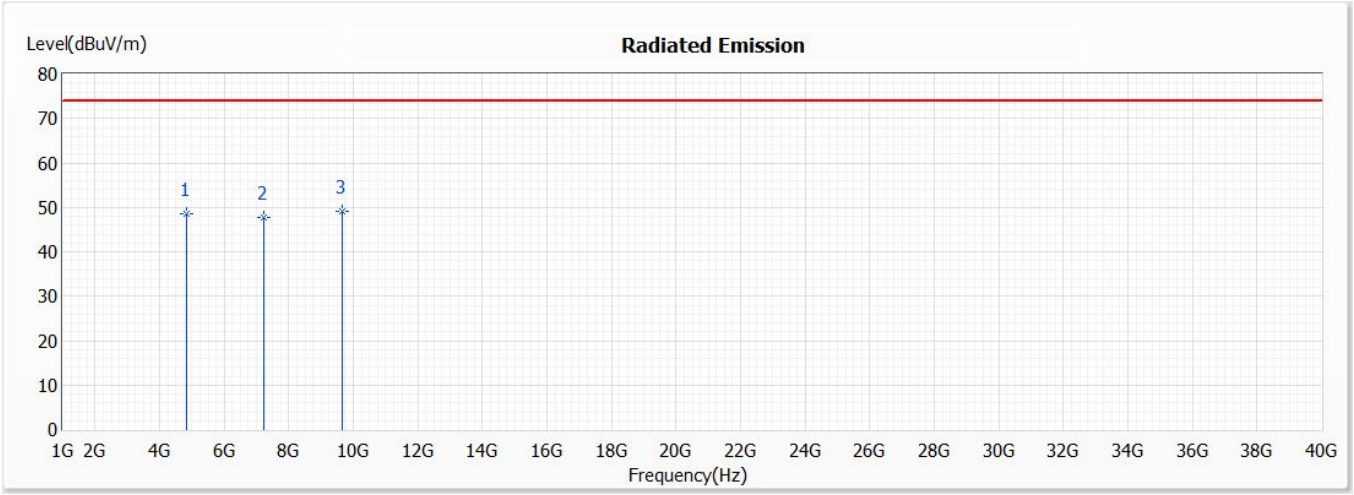
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4824.000	49.54	74.00	-24.46	51.09	-1.55	PK
2	7236.000	47.68	74.00	-26.32	44.75	2.93	PK
3	9648.000	49.27	74.00	-24.73	44.25	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date	:	2021/05/25

Vertical



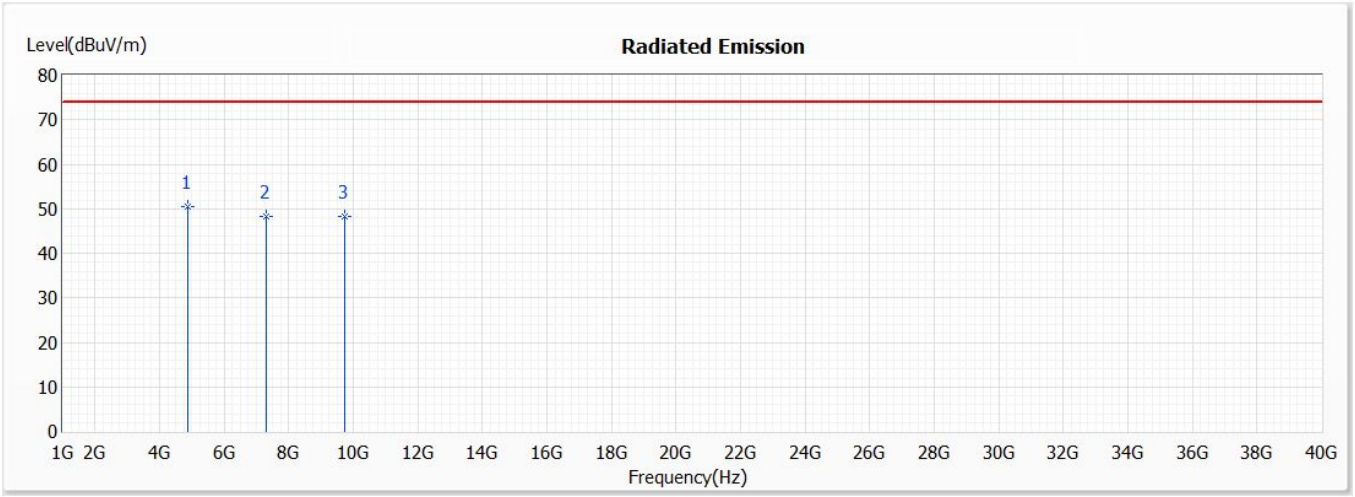
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4824.000	48.47	74.00	-25.53	50.02	-1.55	PK
2	7236.000	47.73	74.00	-26.27	44.80	2.93	PK
* 3	9648.000	49.12	74.00	-24.88	44.10	5.02	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2437 MHz)
Test Date	:	2021/05/25

Horizontal



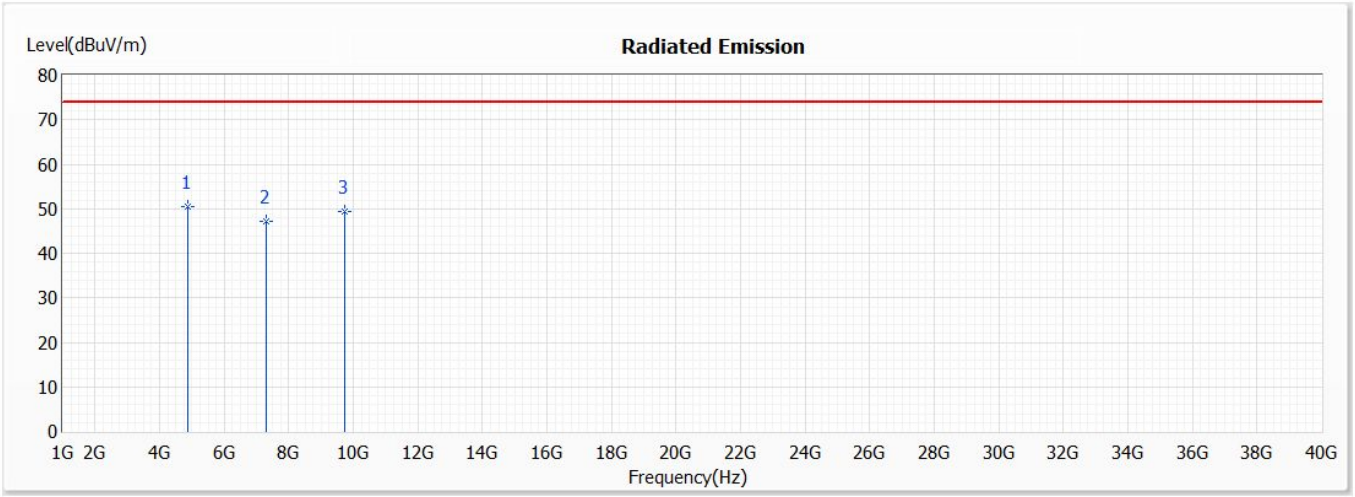
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	50.58	74.00	-23.42	52.08	-1.50	PK
2	7311.000	48.30	74.00	-25.70	45.35	2.95	PK
3	9748.000	48.30	74.00	-25.70	43.06	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Harmonic Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2437 MHz)
Test Date	:	2021/05/25

Vertical



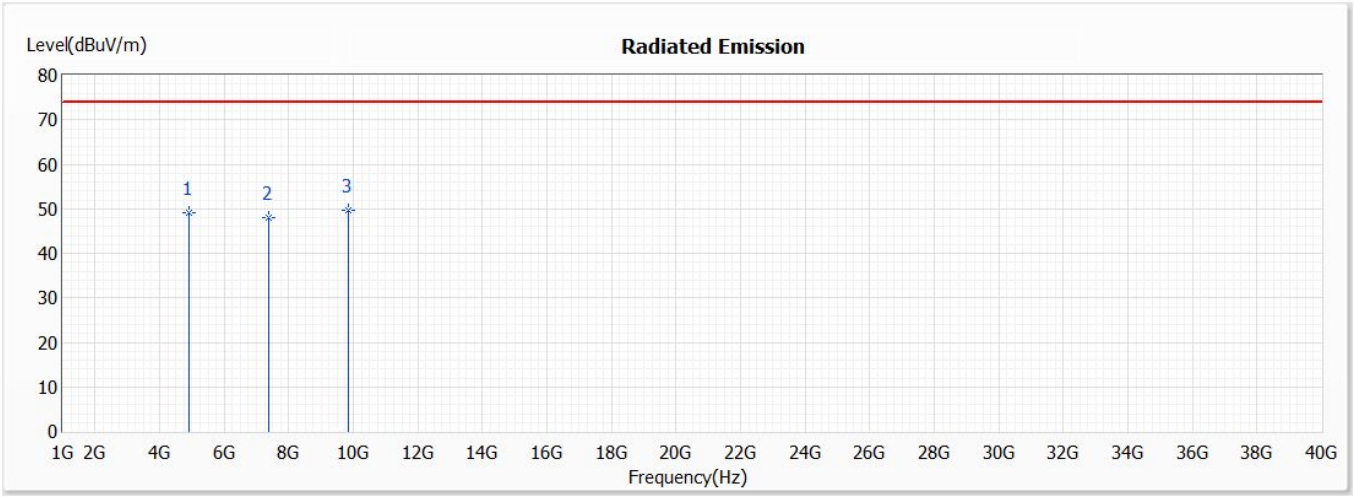
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	4874.000	50.49	74.00	-23.51	51.99	-1.50	PK
2	7311.000	47.12	74.00	-26.88	44.17	2.95	PK
3	9748.000	49.51	74.00	-24.49	44.27	5.24	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Harmonic Radiated Emission Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462 MHz)
Test Date : 2021/05/25

Horizontal



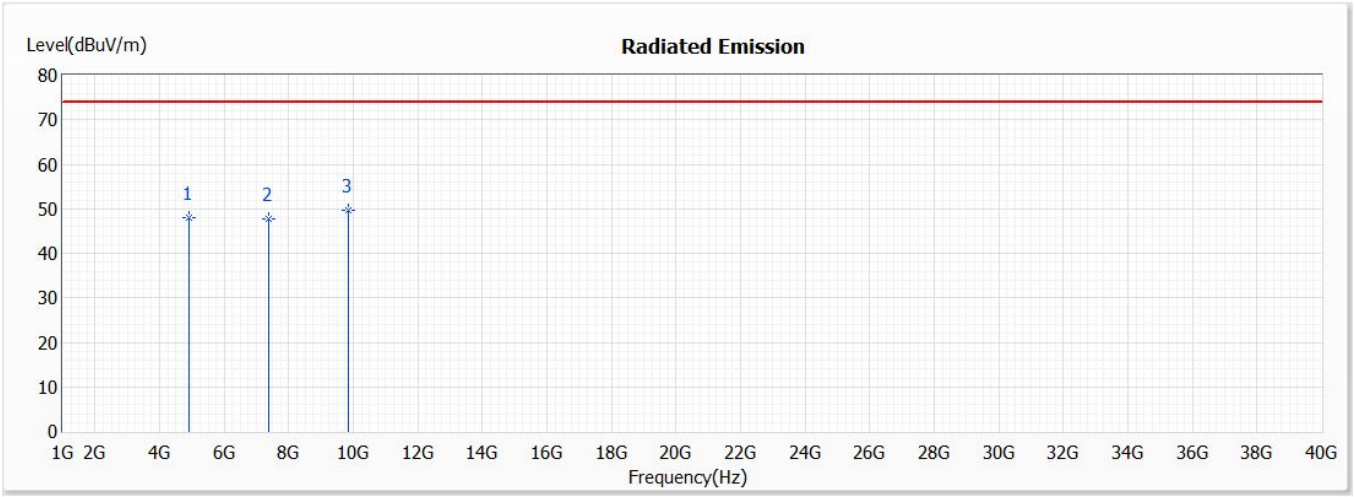
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	49.21	74.00	-24.79	50.53	-1.32	PK
2	7386.000	47.93	74.00	-26.07	44.93	3.00	PK
* 3	9848.000	49.60	74.00	-24.40	44.23	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Harmonic Radiated Emission Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462 MHz)
Test Date : 2021/05/25

Vertical



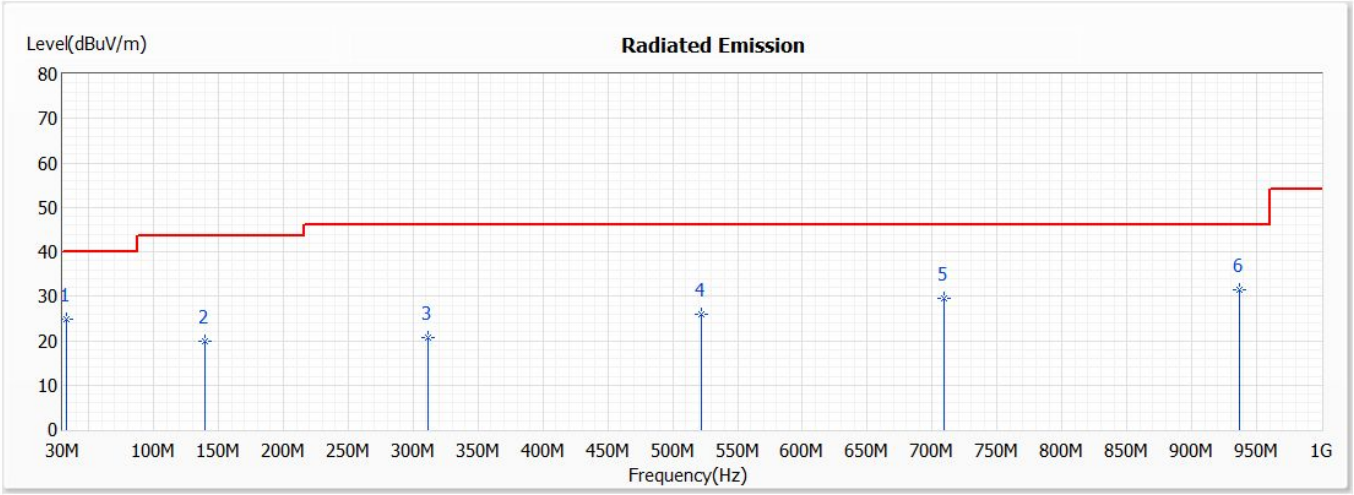
	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4924.000	48.13	74.00	-25.87	49.45	-1.32	PK
2	7386.000	47.77	74.00	-26.23	44.77	3.00	PK
* 3	9848.000	49.61	74.00	-24.39	44.24	5.37	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	General Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)(2437 MHz)
Test Date	:	2021/06/04

Horizontal



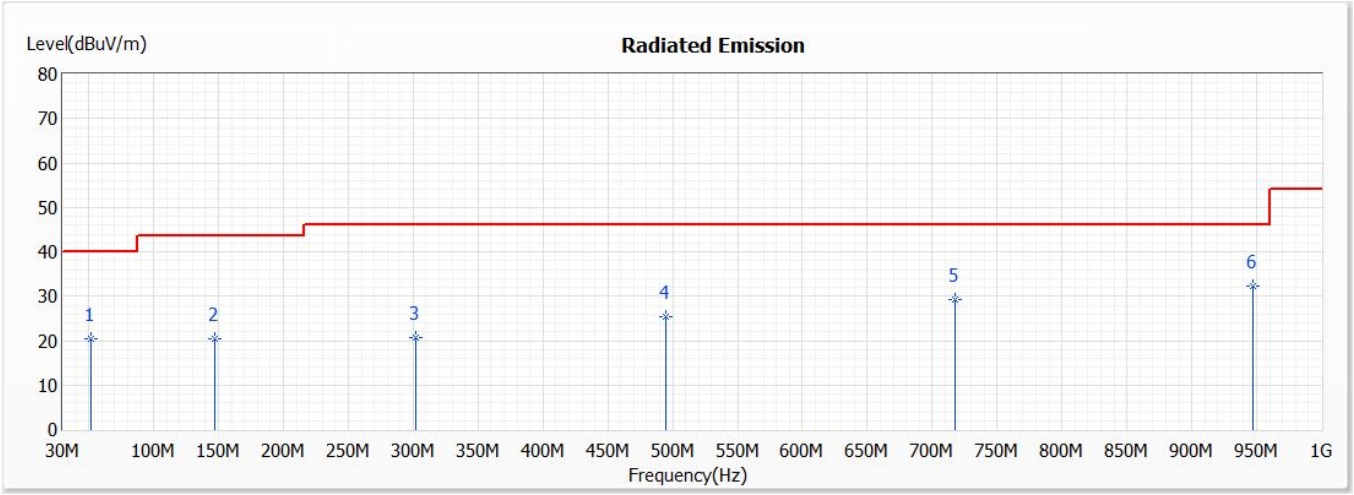
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	32.910	24.84	40.00	-15.16	36.56	-11.72	QP
2	139.610	19.95	43.50	-23.55	30.82	-10.87	QP
3	311.300	20.77	46.00	-25.23	30.22	-9.45	QP
4	521.790	25.85	46.00	-20.15	30.46	-4.61	QP
5	709.000	29.38	46.00	-16.62	30.74	-1.36	QP
* 6	936.950	31.36	46.00	-14.64	29.63	1.73	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	General Radiated Emission Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)(2437 MHz)
Test Date	:	2021/06/04

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	51.340	20.38	40.00	-19.62	30.83	-10.45	QP
2	147.370	20.37	43.50	-23.13	30.83	-10.46	QP
3	301.600	20.72	46.00	-25.28	30.42	-9.70	QP
4	494.630	25.51	46.00	-20.49	30.80	-5.29	QP
5	717.730	29.14	46.00	-16.86	30.38	-1.24	QP
* 6	946.650	32.17	46.00	-13.83	30.28	1.89	QP

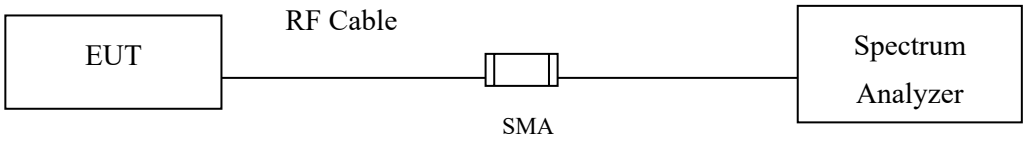
Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.
3. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
4. The emission levels of other frequencies are very lower than the limit and not show in test report.
5. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF antenna conducted test

5.1. Test Setup

RF antenna Conducted Measurement:



5.2. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.3. Test Procedure

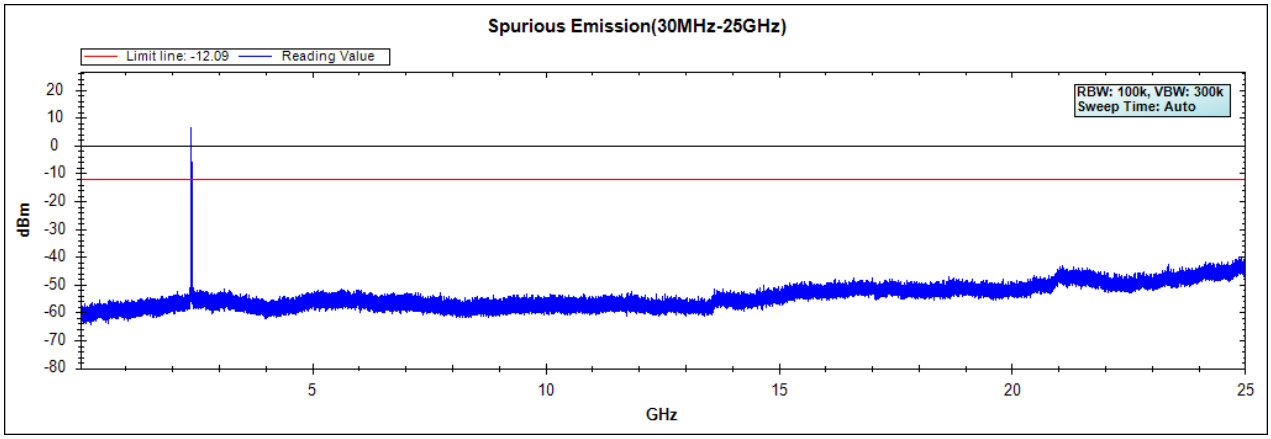
The EUT was tested according to C63.10:2013 Section 11.11 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

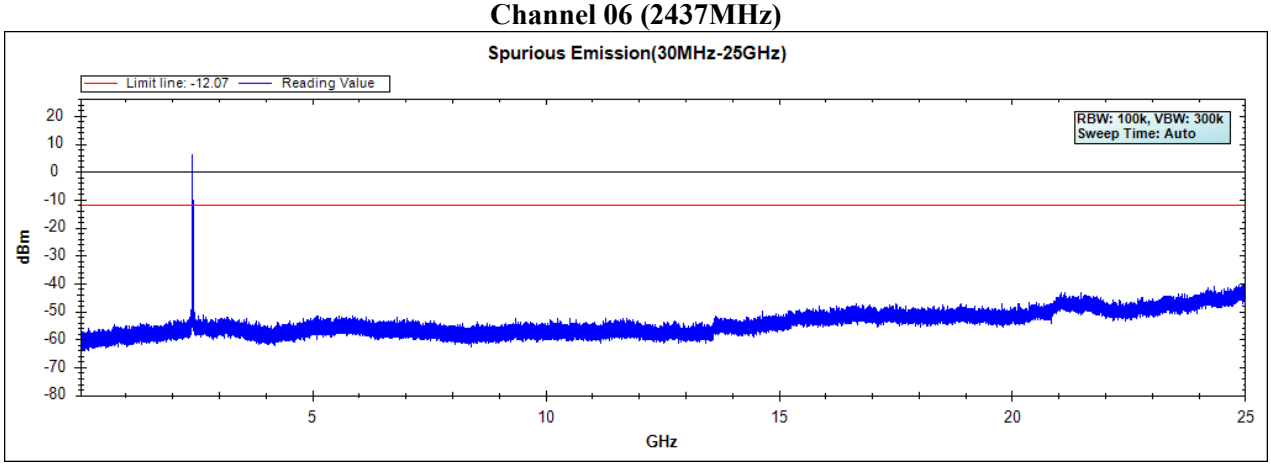
5.4. Test Result of RF antenna conducted test

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	RF antenna conducted test
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps)
Test Date	:	2021/04/19

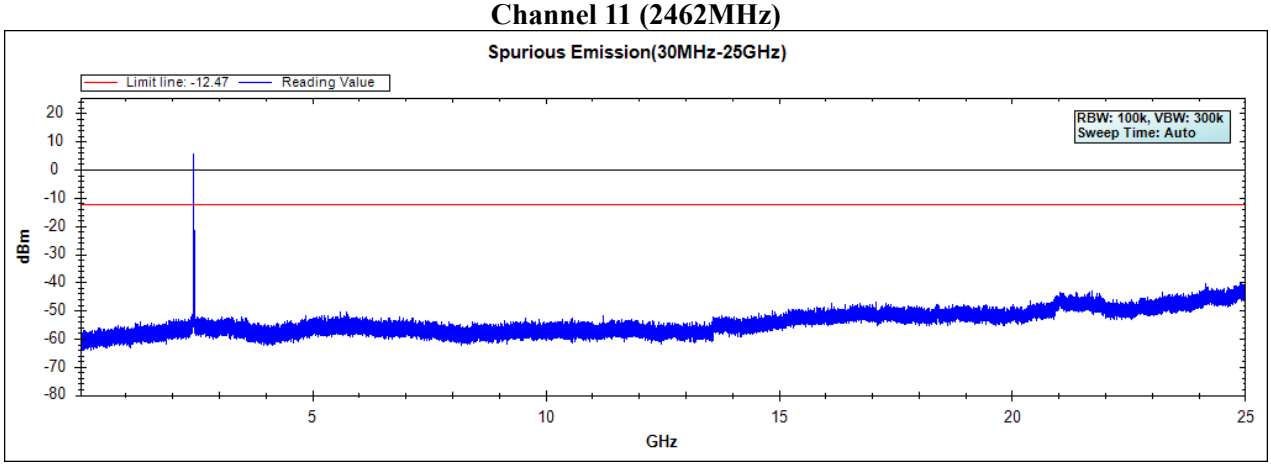
Channel 01 (2412MHz)



Channel 06 (2437MHz)



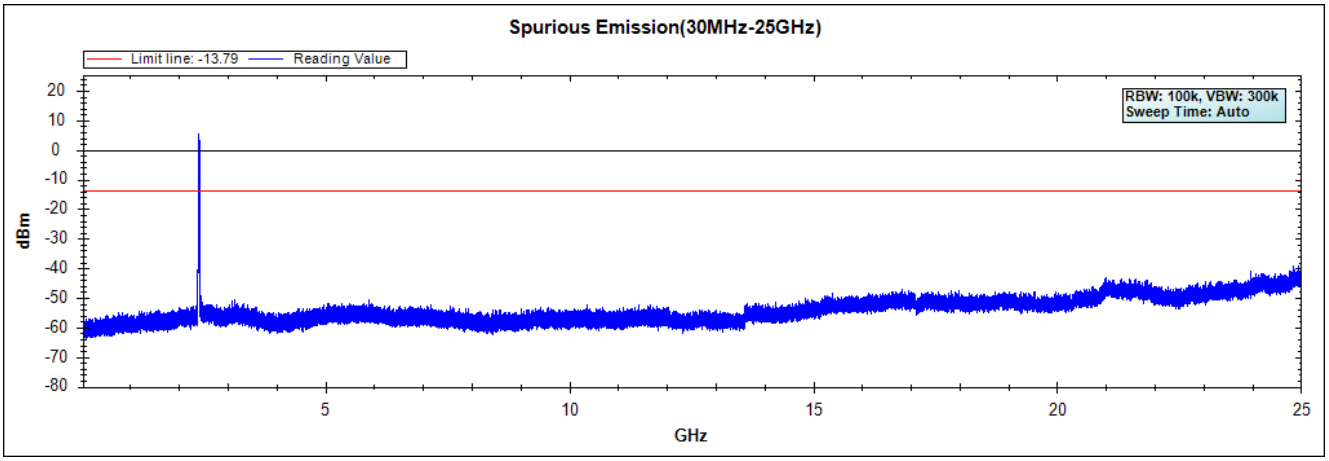
Channel 11 (2462MHz)



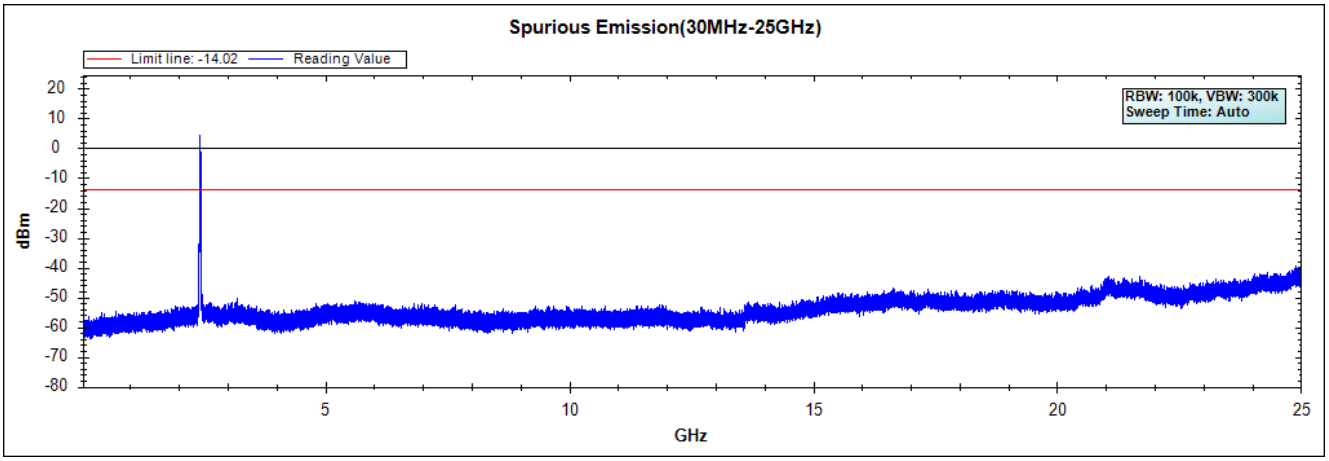
Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	RF Antenna Conducted Spurious
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps)
Test Date	:	2021/04/19

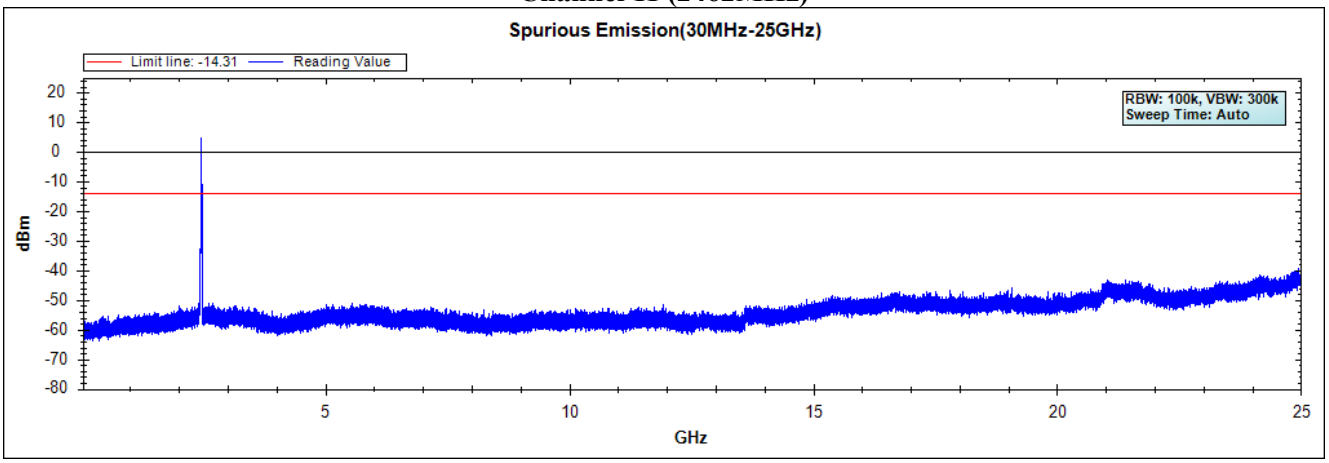
Channel 01 (2412MHz)



Channel 06 (2437MHz)



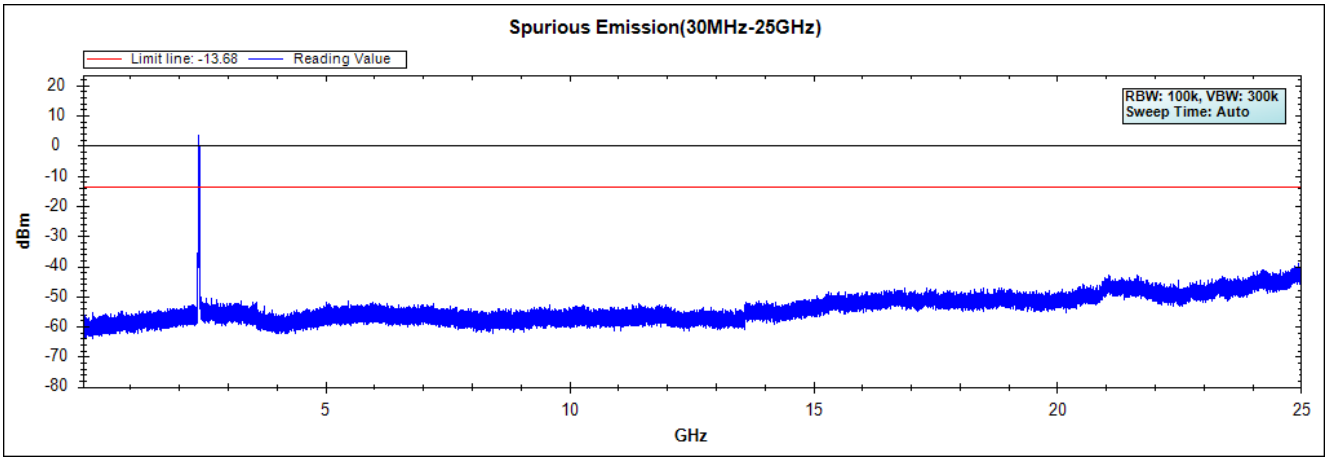
Channel 11 (2462MHz)



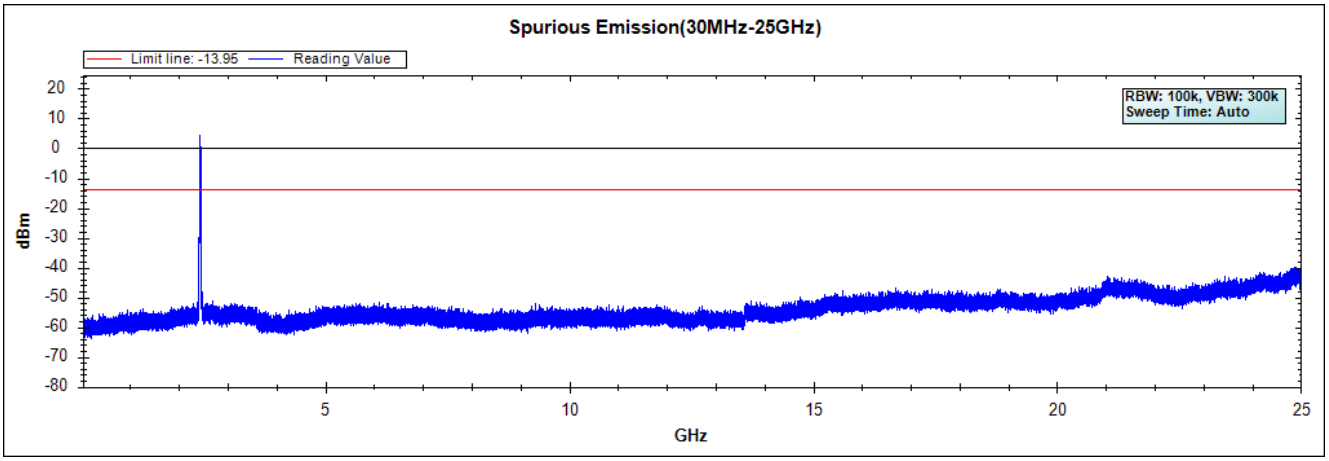
Note: The above test pattern is synthesized by multiple of the frequency range.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	RF Antenna Conducted Spurious
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)
Test Date	:	2021/04/19

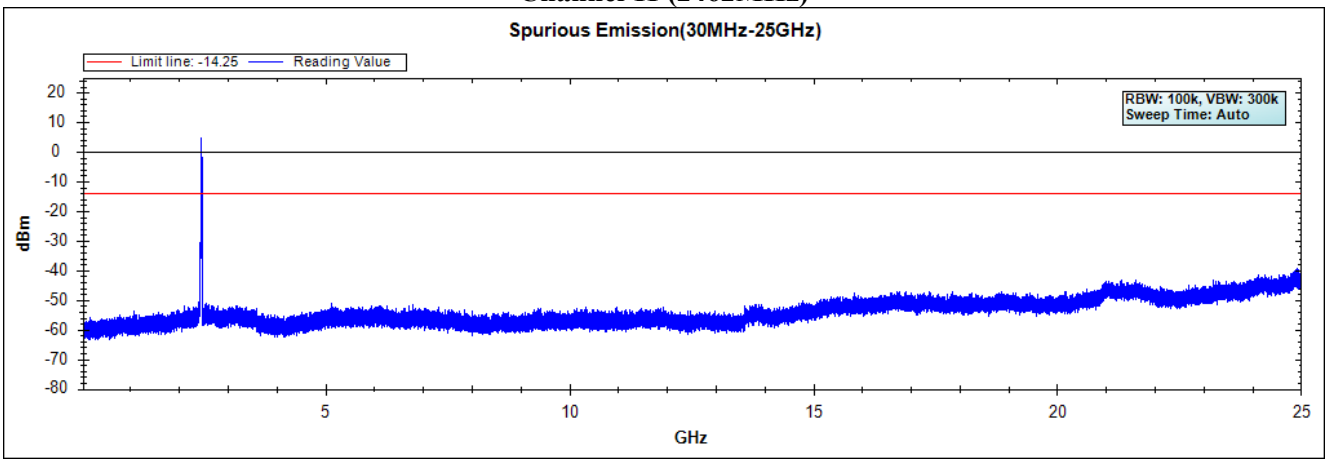
Channel 01 (2412MHz)



Channel 06 (2437MHz)



Channel 11 (2462MHz)

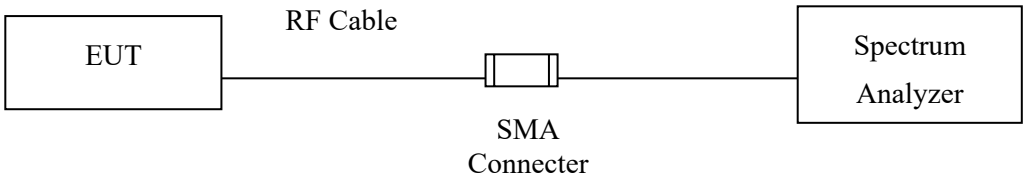


Note: The above test pattern is synthesized by multiple of the frequency range.

6. Band Edge

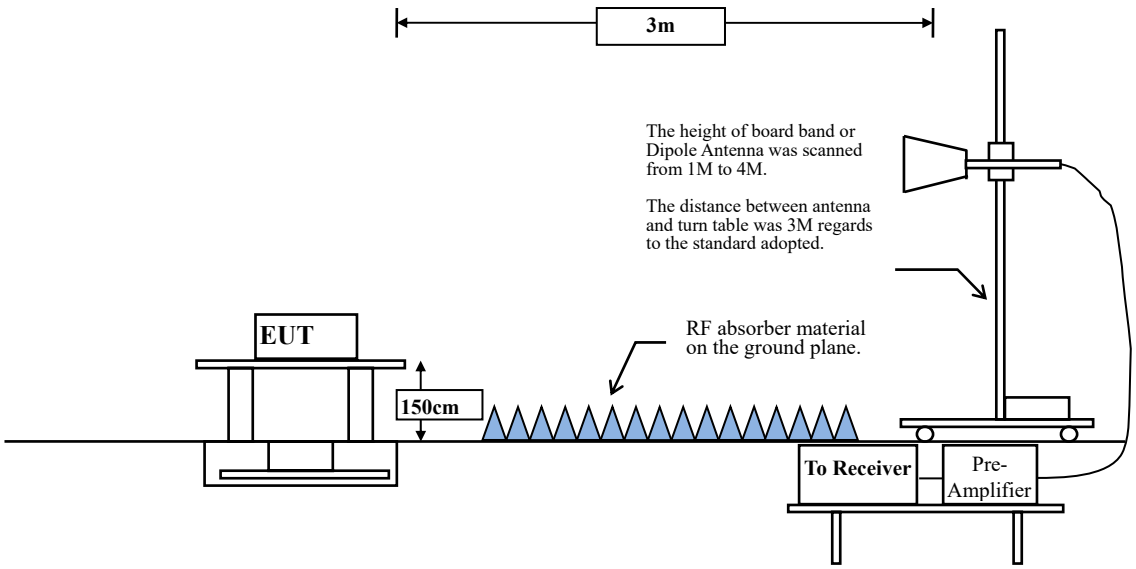
6.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:

Above 1GHz



6.2. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to C63.10:2013 Section 11.12.1 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

RBW and VBW Parameter setting:

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

VBW ≥ 3 x RBW.

Table 1 —RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

According to C63.10 Section 11.12.2.5 Average measurement procedure.

RBW = 1MHz.

VBW = 10Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

(T refers to 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.)

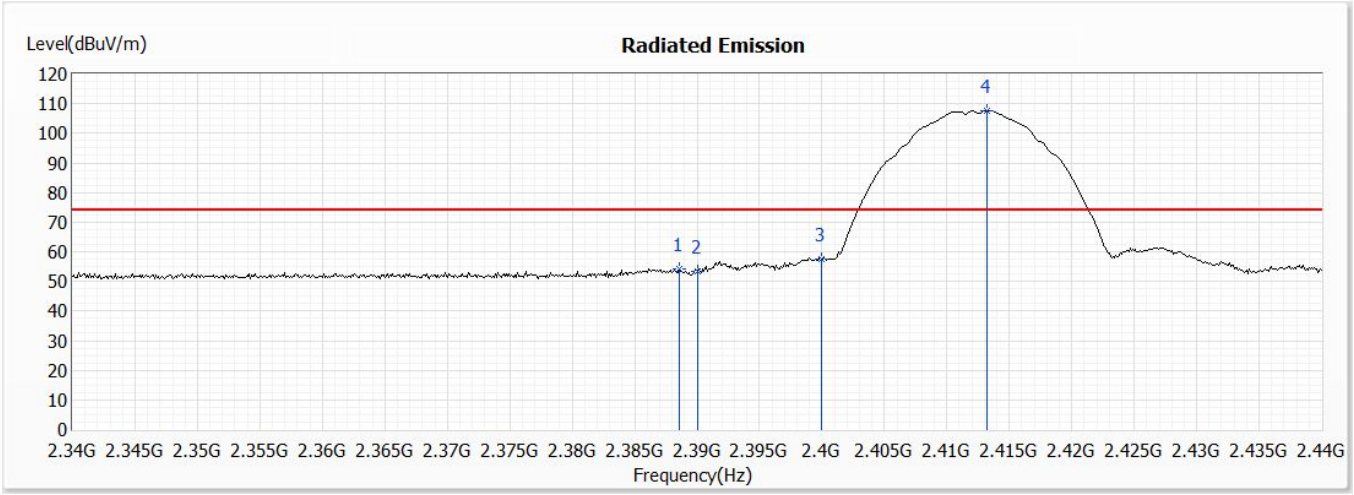
2.4GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11b	99.57	8.3880	119	10
802.11g	97.20	1.3880	720	1000
802.11ac20	97.49	1.3138	761	1000

Note: Duty Cycle Refer to Section 9.

6.4. Test Result of Band Edge

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/20

Horizontal



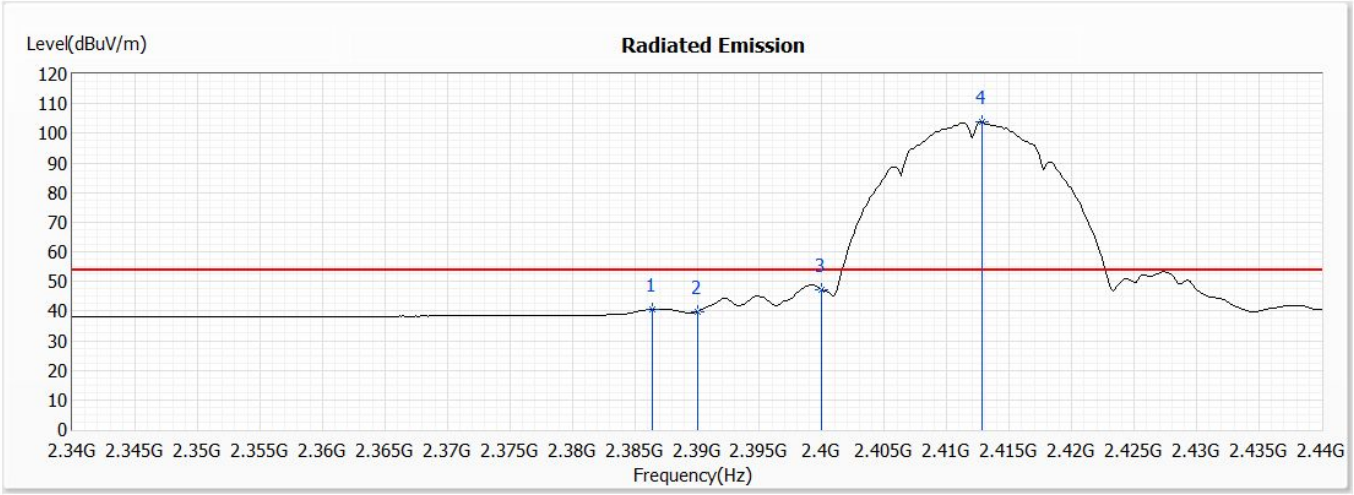
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2388.600	54.14	74.00	-19.86	41.77	12.37	PK
2	2390.000	53.20	74.00	-20.80	40.82	12.38	PK
3	2400.000	57.49	--	--	45.03	12.46	PK
! 4	2413.200	107.70	--	--	95.19	12.51	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/20

Horizontal



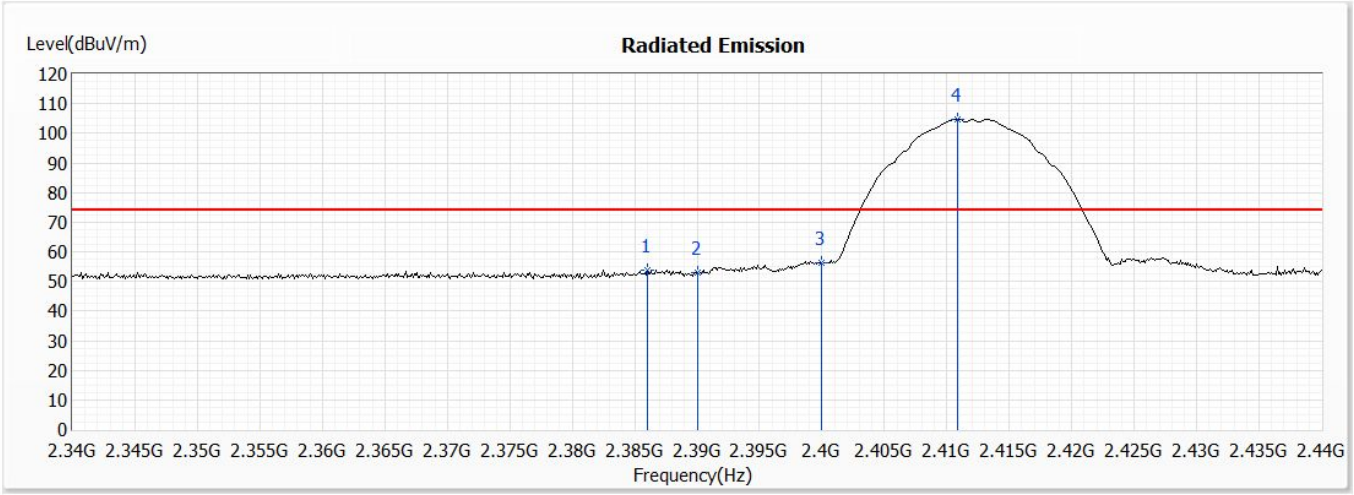
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2386.400	40.52	54.00	-13.48	28.16	12.36	AV
2	2390.000	39.74	54.00	-14.26	27.36	12.38	AV
3	2400.000	47.17	--	--	34.71	12.46	AV
! 4	2412.800	103.87	--	--	91.36	12.51	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Band Edge Data
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date : 2021/05/20

Vertical



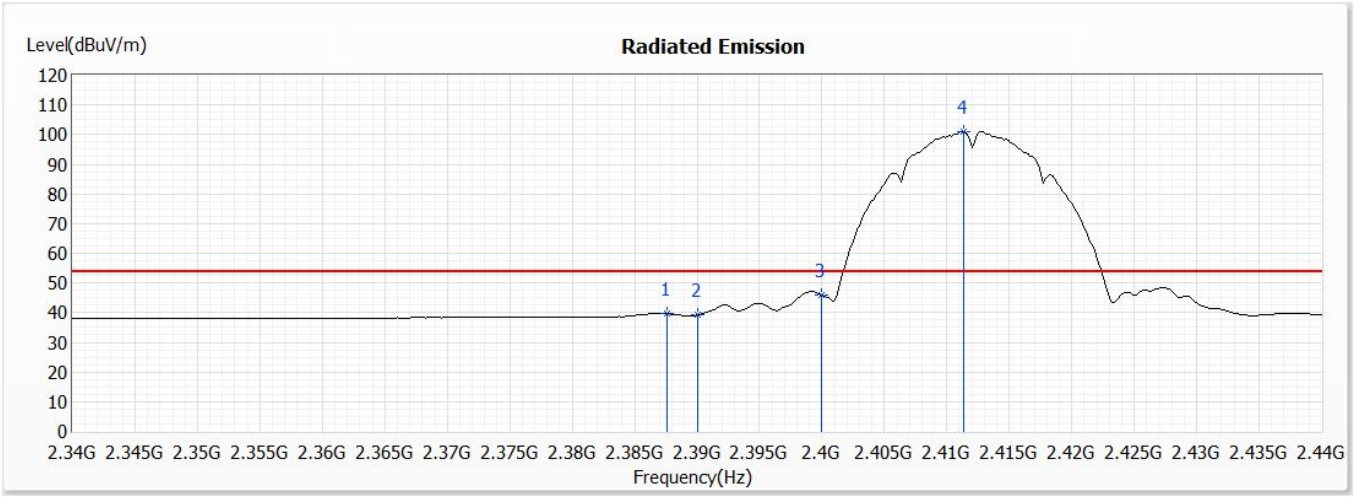
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2386.000	53.76	74.00	-20.24	41.40	12.36	PK
2	2390.000	52.80	74.00	-21.20	40.42	12.38	PK
3	2400.000	56.21	--	--	43.75	12.46	PK
! 4	2410.900	104.68	--	--	92.19	12.49	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2412MHz)
Test Date	:	2021/05/20

Vertical



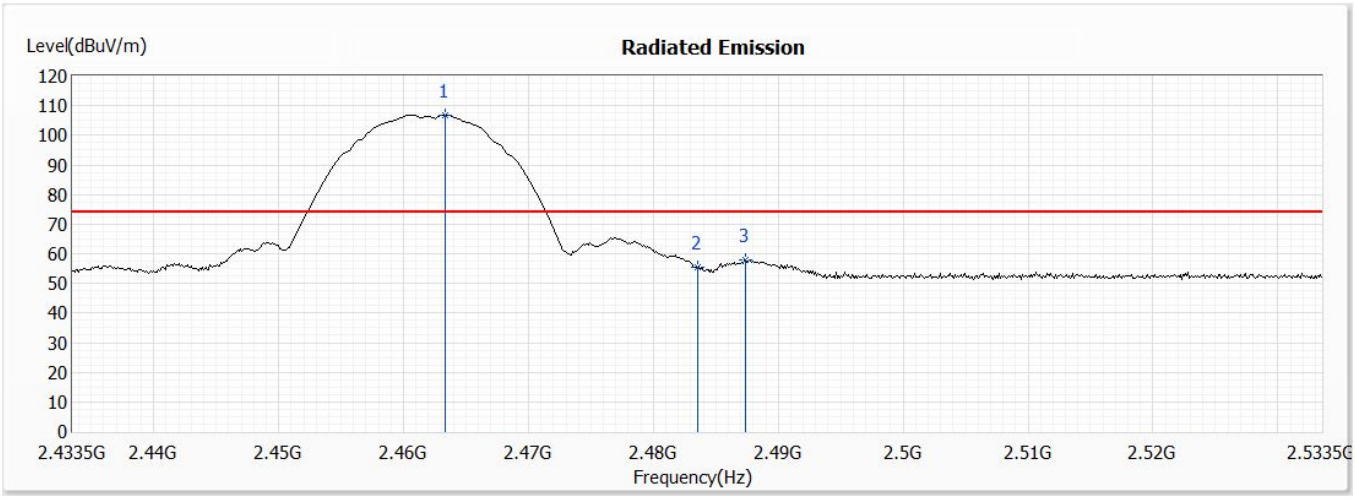
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2387.600	39.58	54.00	-14.42	27.21	12.37	AV
2	2390.000	39.15	54.00	-14.85	26.77	12.38	AV
3	2400.000	45.87	--	--	33.41	12.46	AV
! 4	2411.300	100.99	--	--	88.50	12.49	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Band Edge Data
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
Test Date : 2021/05/20

Horizontal



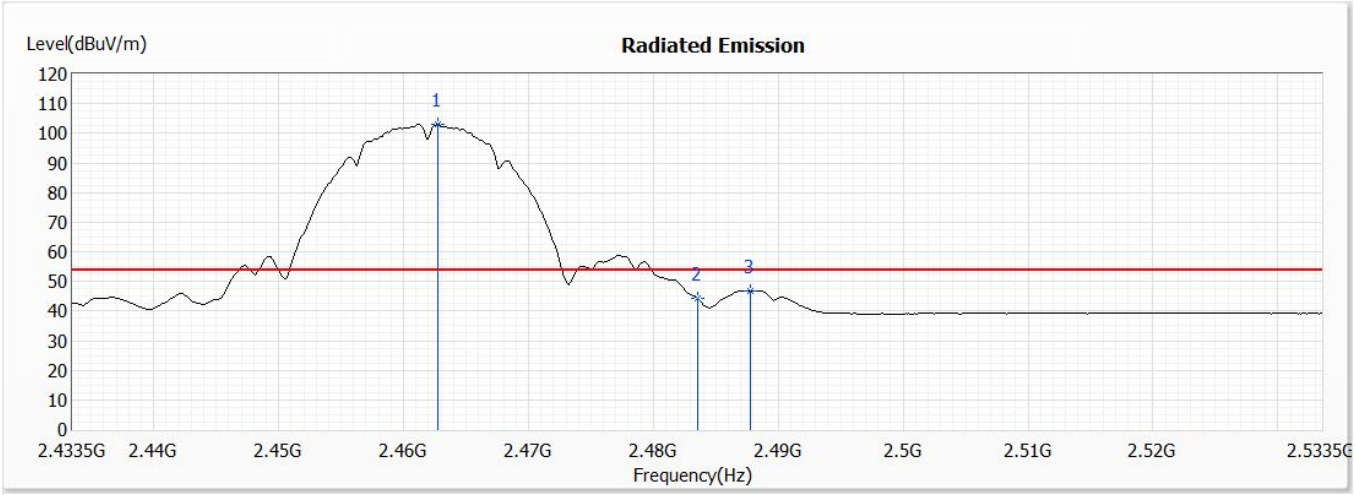
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2463.300	106.86	--	--	94.19	12.67	PK
2	2483.500	55.63	74.00	-18.37	42.90	12.73	PK
3	2487.400	58.01	74.00	-15.99	45.28	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
Test Date	:	2021/05/20

Horizontal



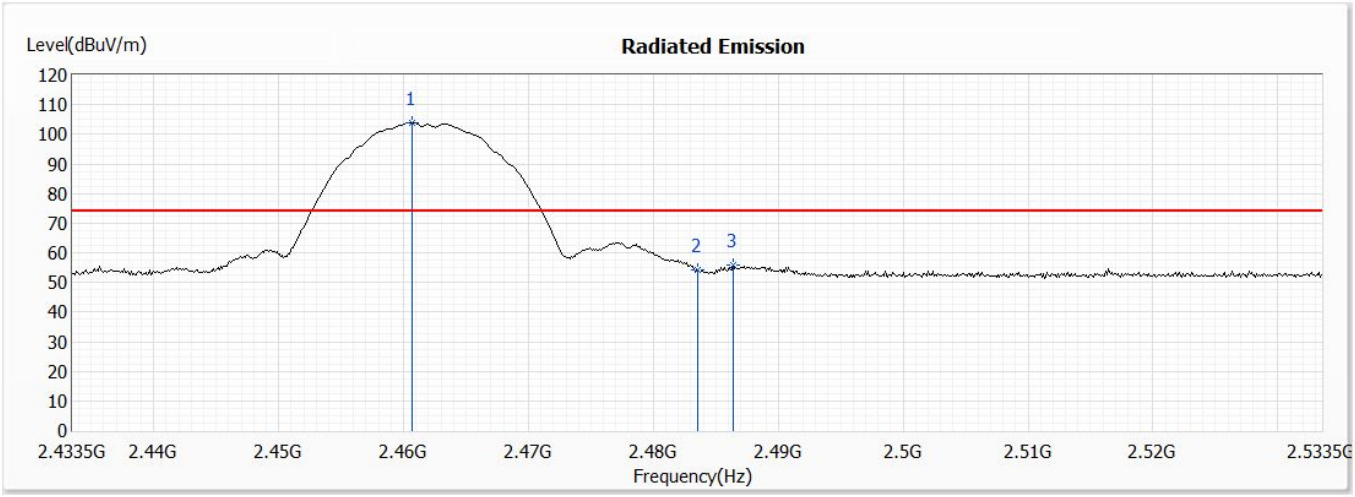
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2462.700	102.97	--	--	90.31	12.66	AV
2	2483.500	44.26	54.00	-9.74	31.53	12.73	AV
3	2487.800	46.93	54.00	-7.07	34.18	12.75	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
Test Date	:	2021/05/20

Vertical



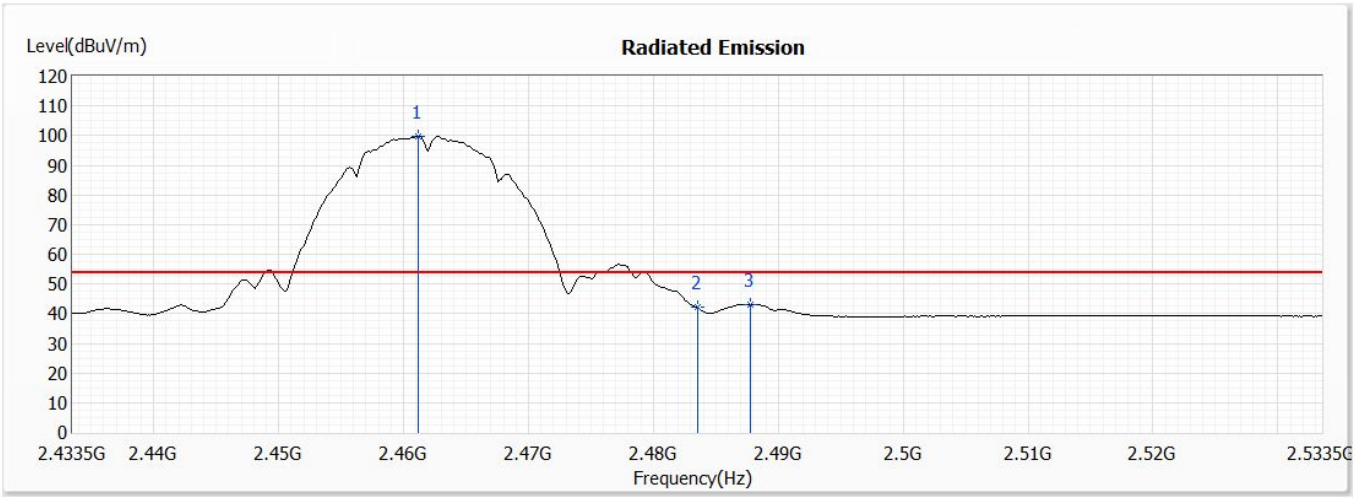
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2460.700	103.90	--	--	91.25	12.65	PK
2	2483.500	54.37	74.00	-19.63	41.64	12.73	PK
3	2486.400	55.68	74.00	-18.32	42.95	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 1: Transmit (802.11b 1Mbps) (2462MHz)
Test Date	:	2021/05/20

Vertical



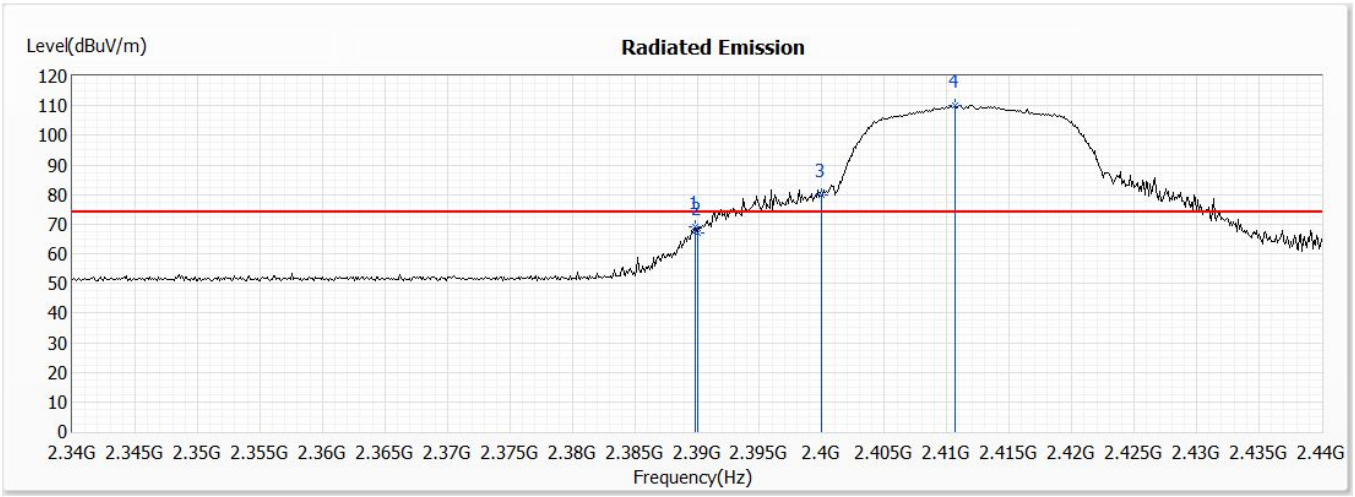
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2461.200	99.91	--	--	87.26	12.65	AV
2	2483.500	42.01	54.00	-11.99	29.28	12.73	AV
3	2487.800	43.21	54.00	-10.79	30.46	12.75	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date	:	2021/05/20

Horizontal



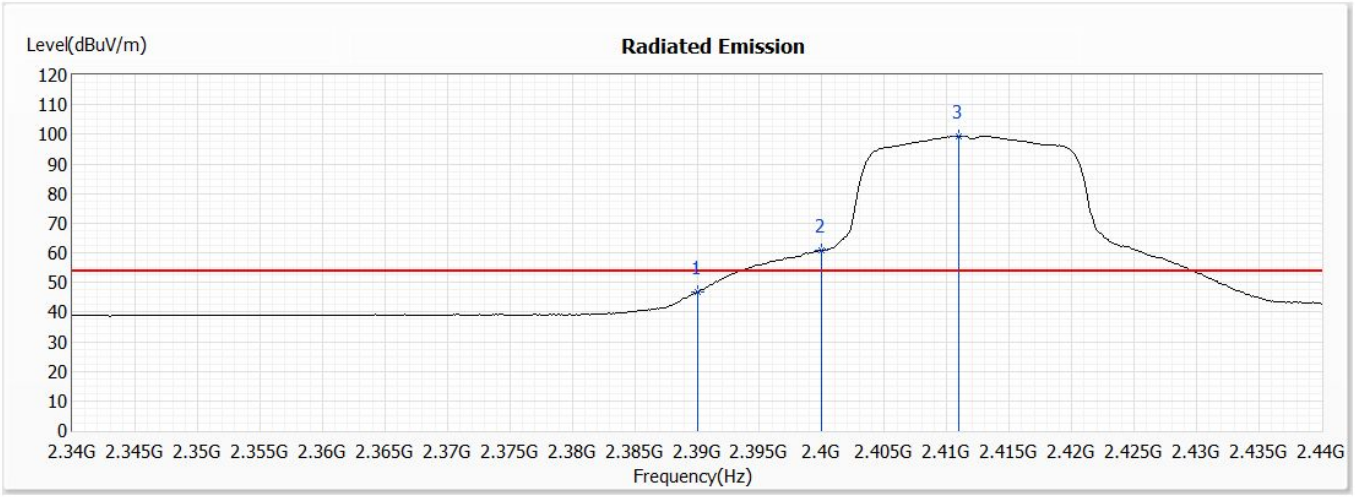
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2389.900	69.30	74.00	-4.70	56.92	12.38	PK
2	2390.000	67.14	74.00	-6.86	54.76	12.38	PK
! 3	2400.000	79.83	--	--	67.37	12.46	PK
! 4	2410.700	110.27	--	--	97.78	12.49	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date	:	2021/05/20

Horizontal



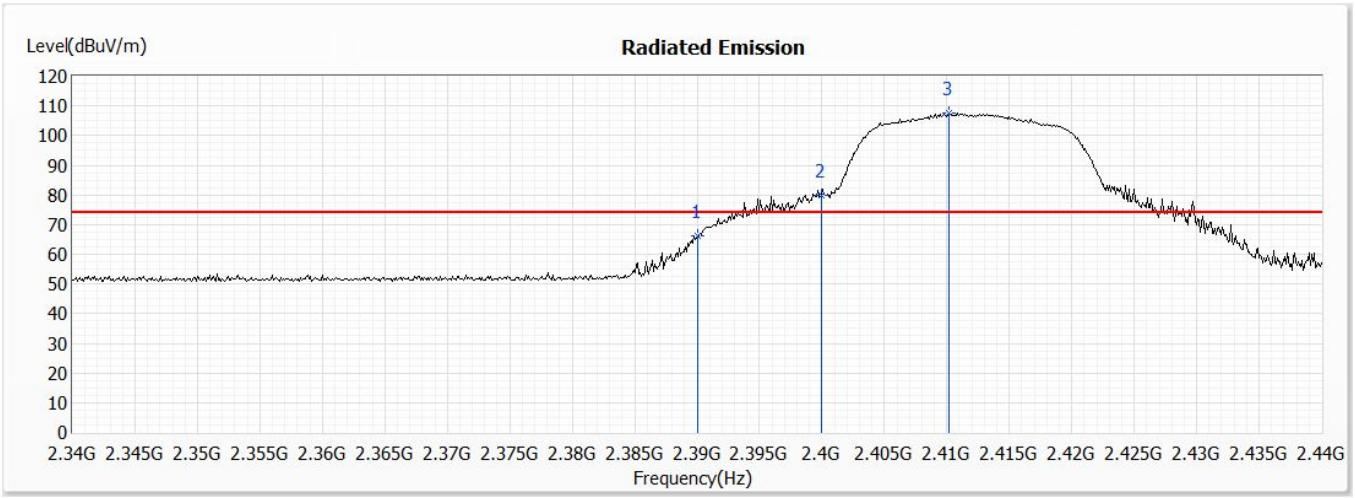
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	46.65	54.00	-7.35	34.27	12.38	AV
! 2	2400.000	60.88	--	--	48.42	12.46	AV
! 3	2411.000	99.49	--	--	87.00	12.49	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date	:	2021/05/20

Vertical



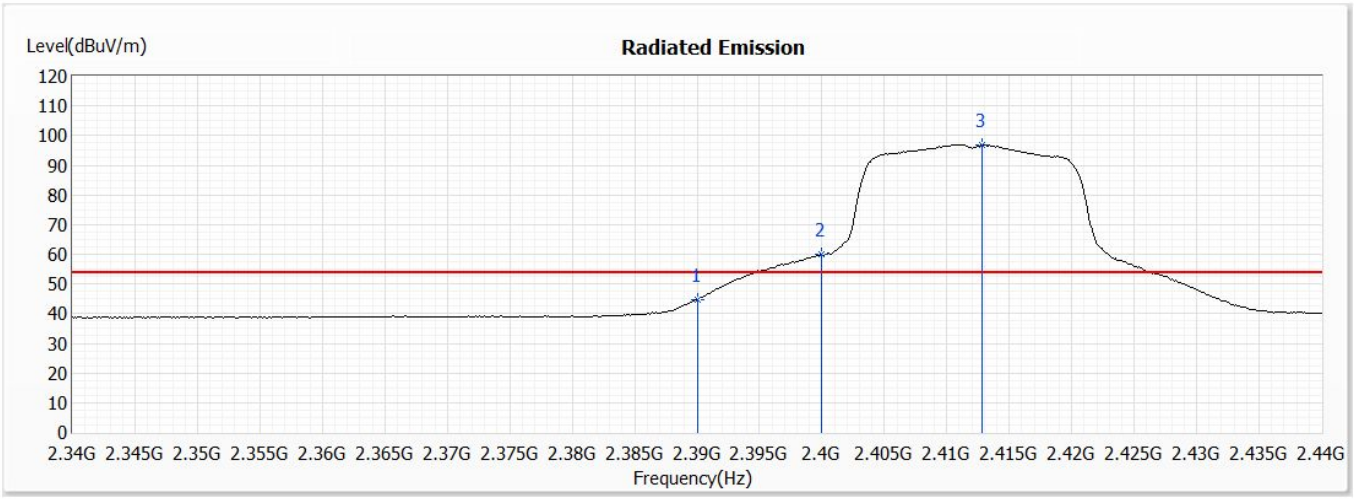
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	66.33	74.00	-7.67	53.95	12.38	PK
! 2	2400.000	79.98	--	--	67.52	12.46	PK
! 3	2410.200	107.65	--	--	95.16	12.49	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Band Edge Data
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)
Test Date : 2021/05/20

Vertical



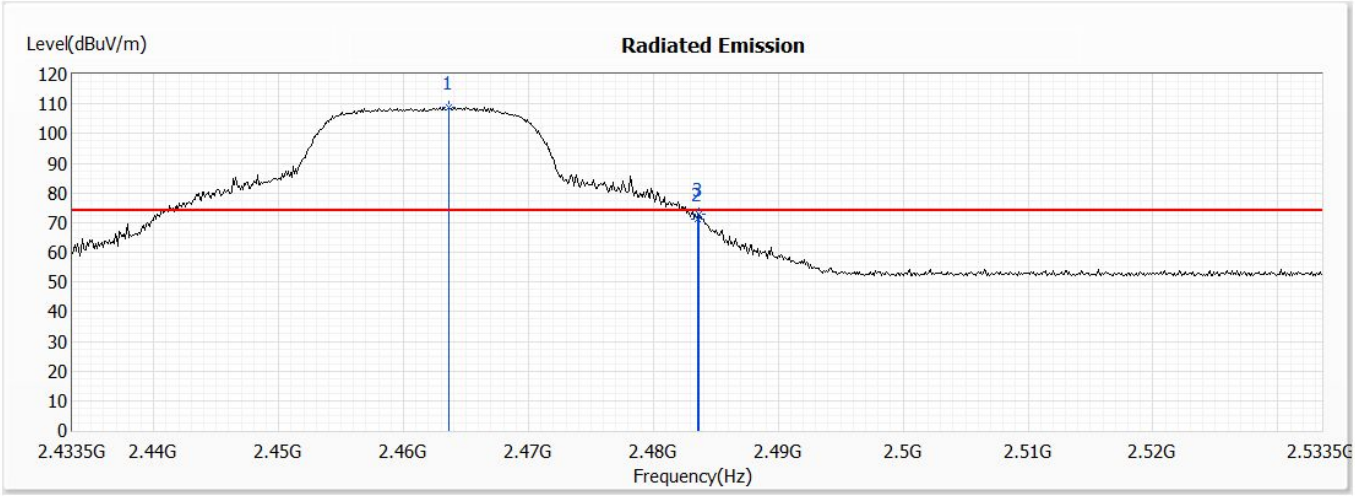
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	44.81	54.00	-9.19	32.43	12.38	AV
! 2	2400.000	59.96	--	--	47.50	12.46	AV
! 3	2412.800	96.86	--	--	84.35	12.51	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
Test Date	:	2021/05/20

Horizontal



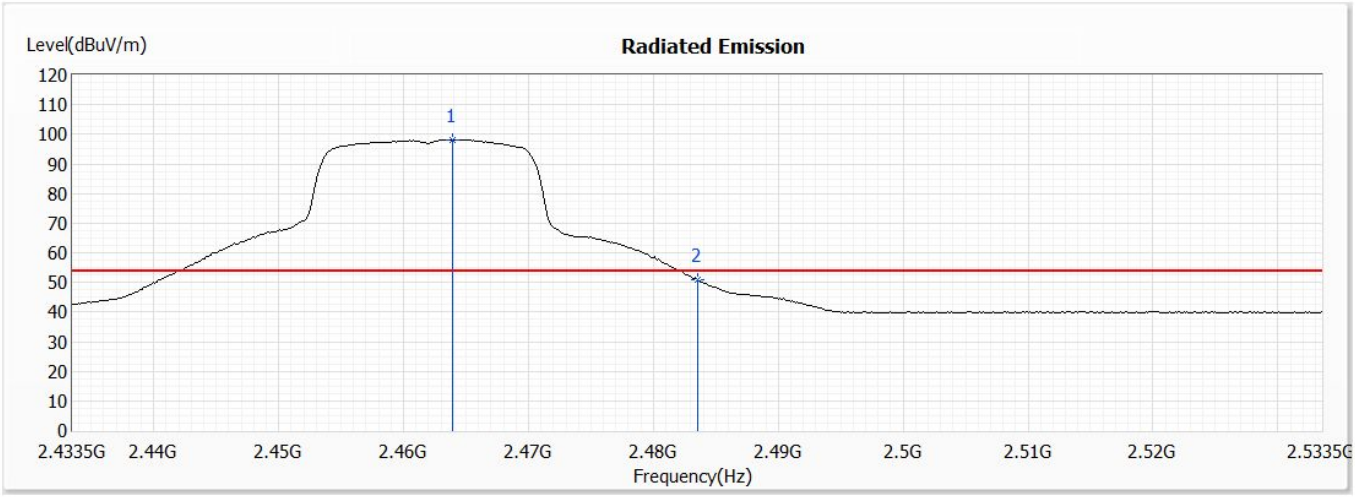
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2463.600	108.96	--	--	96.29	12.67	PK
2	2483.500	71.29	74.00	-2.71	58.56	12.73	PK
3	2483.600	72.90	74.00	-1.10	60.17	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
Test Date	:	2021/05/20

Horizontal



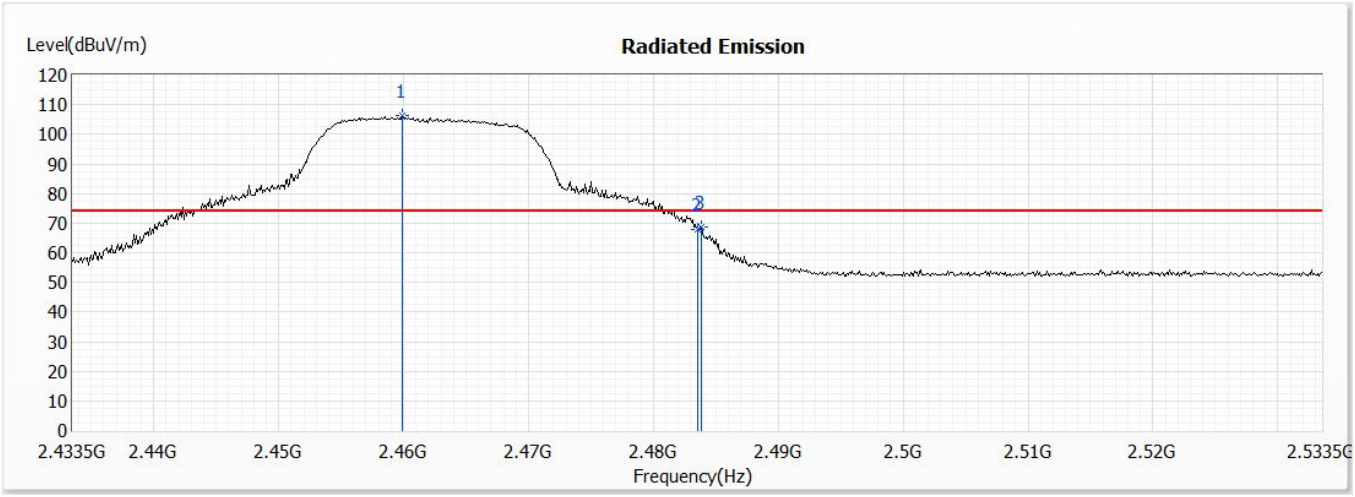
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2463.900	98.20	--	--	85.53	12.67	AV
2	2483.500	50.97	54.00	-3.03	38.24	12.73	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
Test Date	:	2021/05/20

Vertical



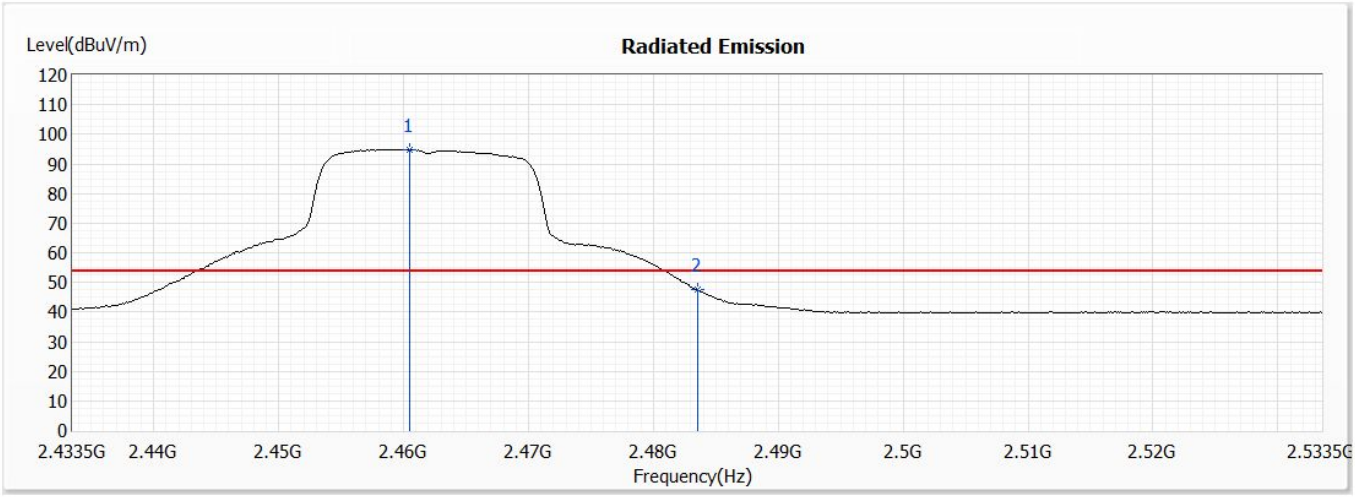
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2459.900	106.43	--	--	93.78	12.65	PK
2	2483.500	67.78	74.00	-6.22	55.05	12.73	PK
3	2483.800	68.60	74.00	-5.40	55.87	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 2: Transmit (802.11g 6Mbps) (2462MHz)
Test Date	:	2021/05/20

Vertical



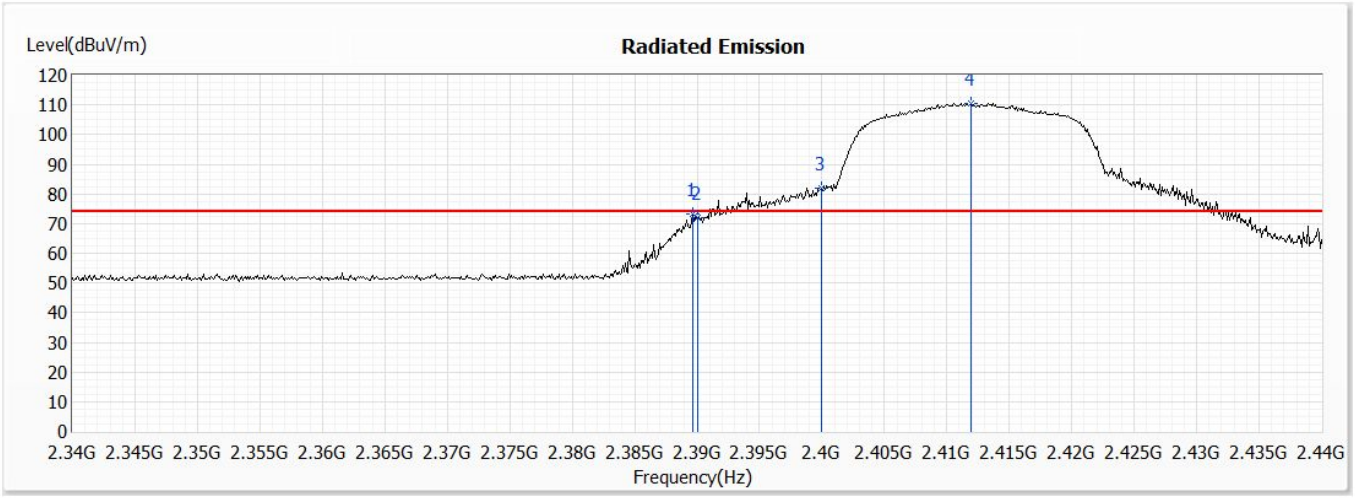
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2460.500	94.91	--	--	82.26	12.65	AV
2	2483.500	47.46	54.00	-6.54	34.73	12.73	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date	:	2021/05/20

Horizontal



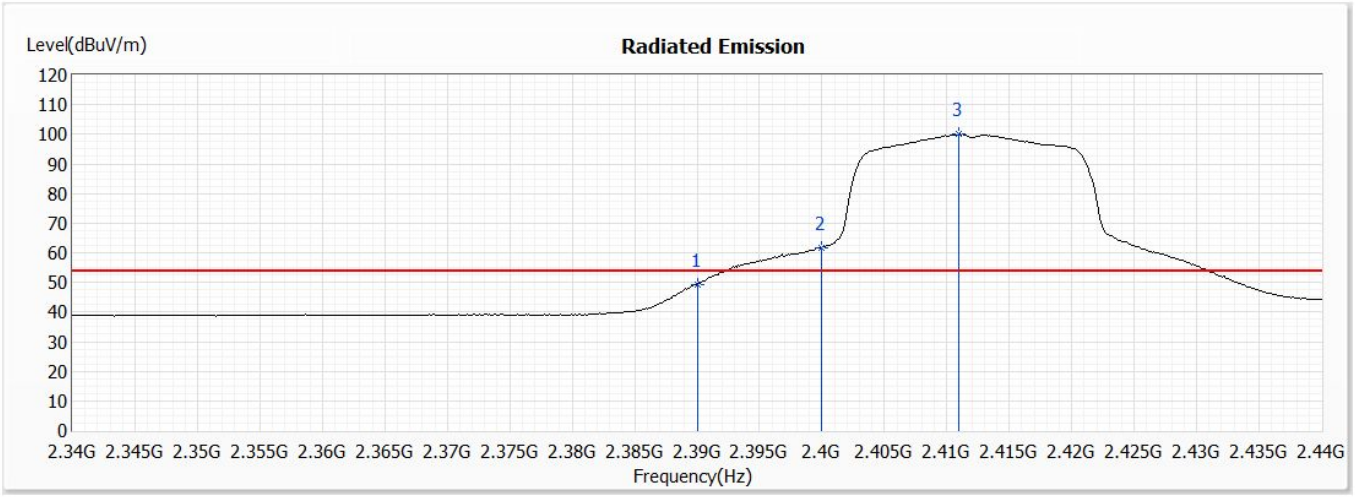
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2389.700	73.22	74.00	-0.78	60.84	12.38	PK
2	2390.000	71.98	74.00	-2.02	59.60	12.38	PK
! 3	2400.000	81.99	--	--	69.53	12.46	PK
! 4	2411.900	110.55	--	--	98.06	12.49	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date	:	2021/05/20

Horizontal



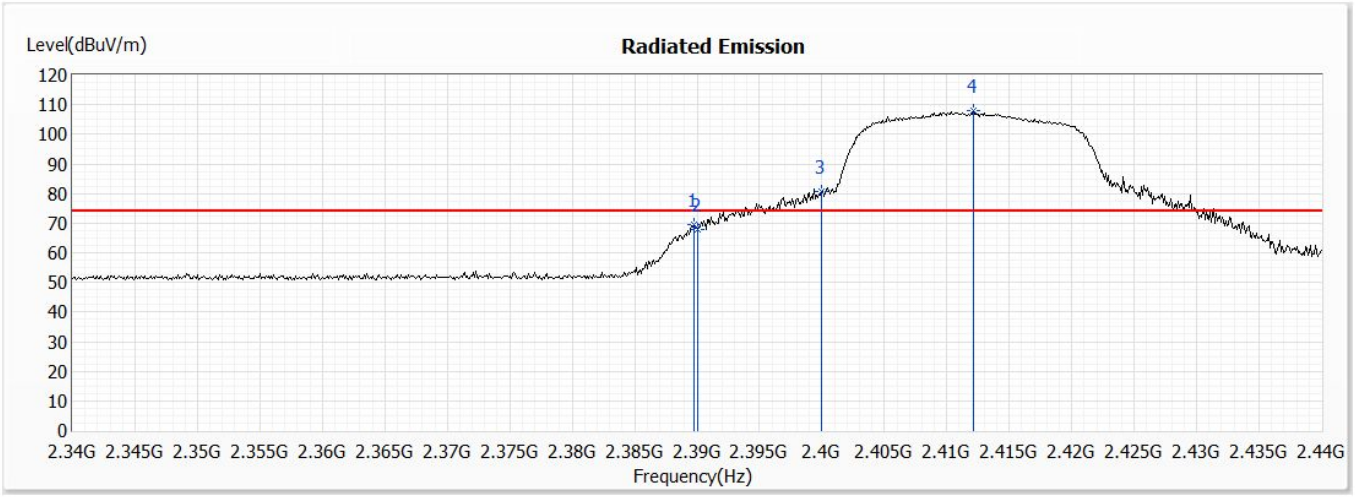
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	49.38	54.00	-4.62	37.00	12.38	AV
! 2	2400.000	61.80	--	--	49.34	12.46	AV
! 3	2411.000	100.09	--	--	87.60	12.49	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Band Edge Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date : 2021/05/20

Vertical



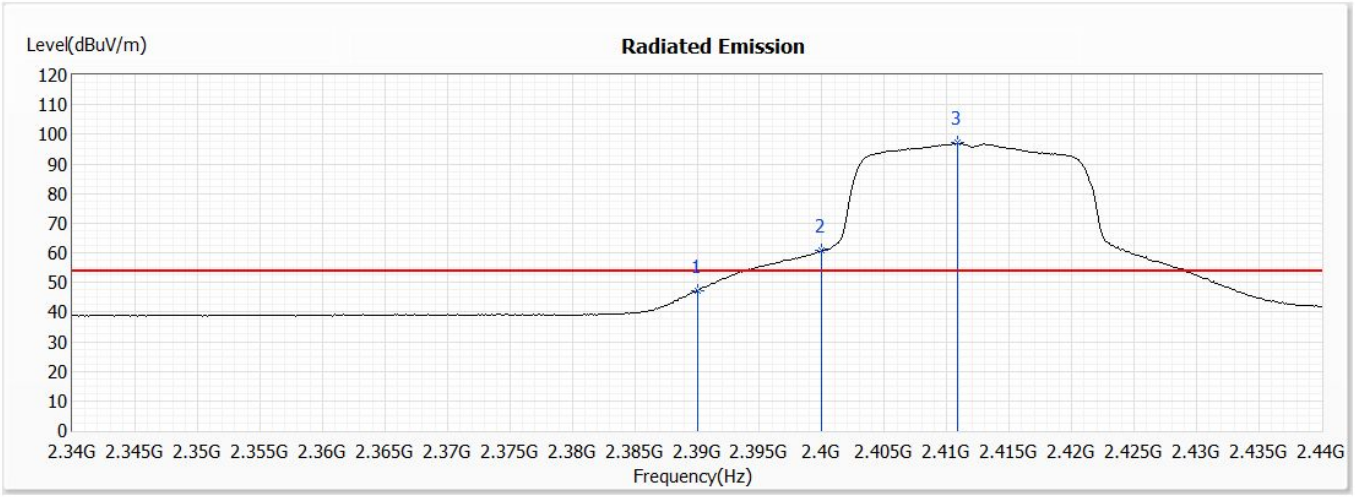
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2389.800	69.47	74.00	-4.53	57.09	12.38	PK
2	2390.000	67.98	74.00	-6.02	55.60	12.38	PK
! 3	2400.000	80.51	--	--	68.05	12.46	PK
! 4	2412.100	107.82	--	--	95.32	12.50	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2412MHz)
Test Date	:	2021/05/20

Vertical



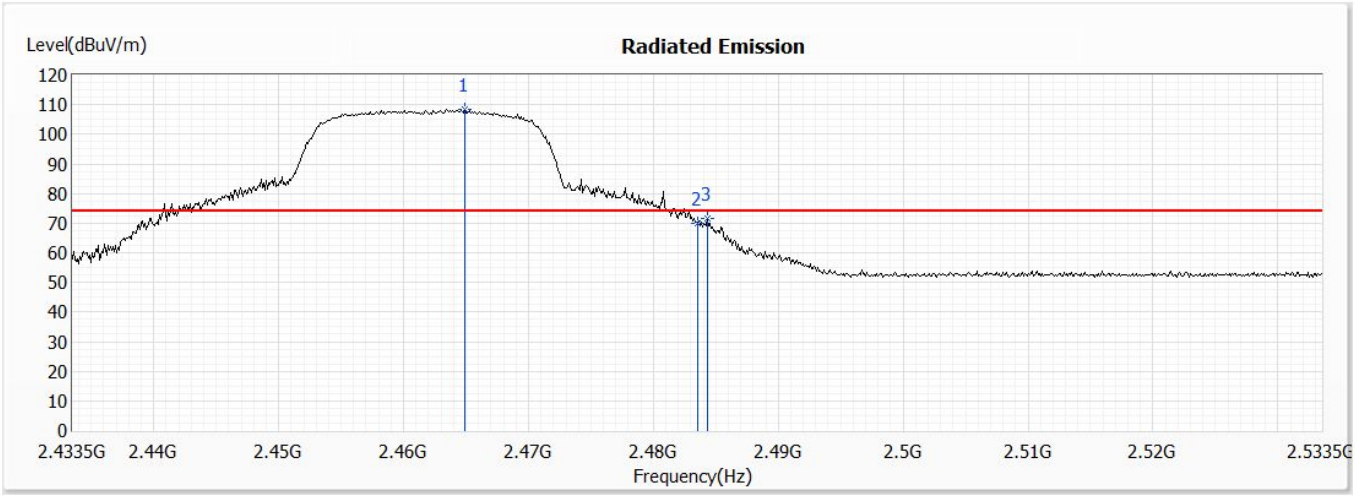
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	47.20	54.00	-6.80	34.82	12.38	AV
! 2	2400.000	60.90	--	--	48.44	12.46	AV
! 3	2410.900	97.08	--	--	84.59	12.49	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462MHz)
Test Date	:	2021/05/20

Horizontal



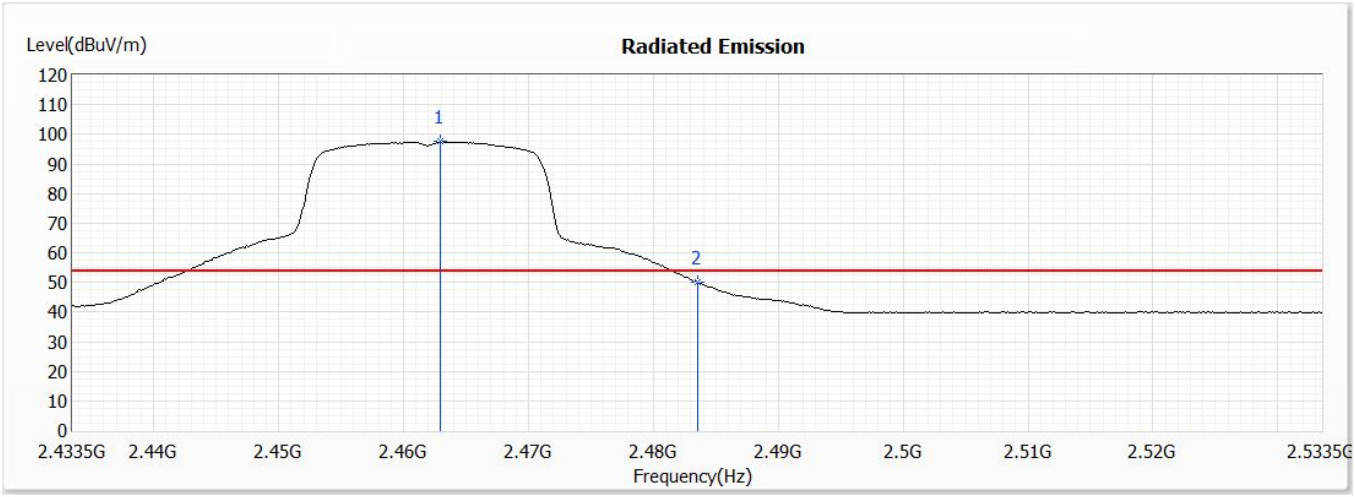
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2464.900	108.54	--	--	95.87	12.67	PK
2	2483.500	70.02	74.00	-3.98	57.29	12.73	PK
3	2484.300	71.65	74.00	-2.35	58.92	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462MHz)
Test Date	:	2021/05/20

Horizontal



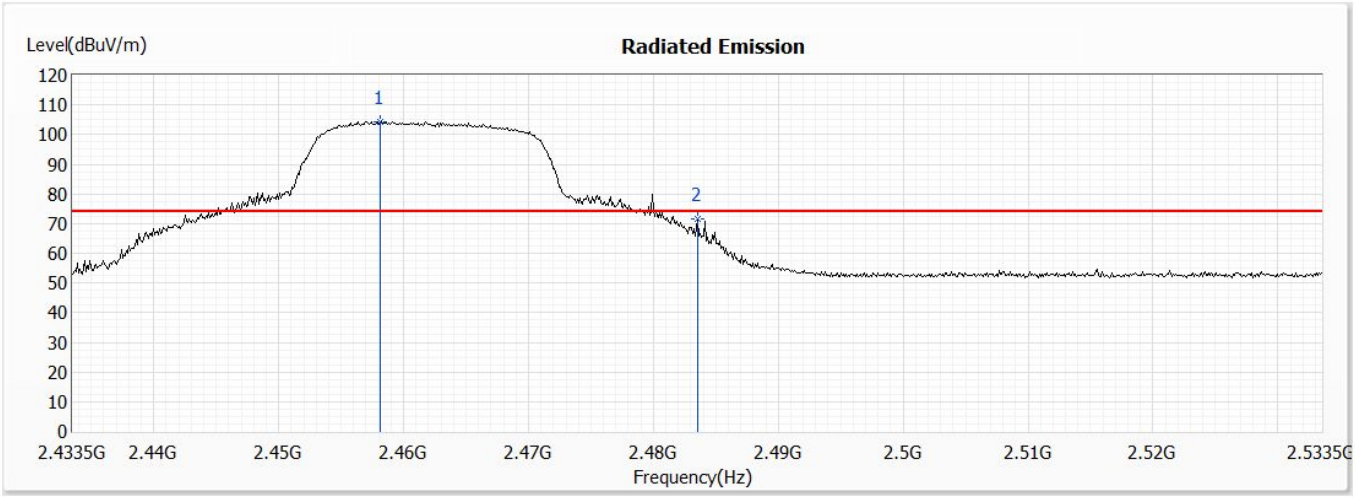
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2462.900	97.48	--	--	84.82	12.66	AV
2	2483.500	49.95	54.00	-4.05	37.22	12.73	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462MHz)
Test Date	:	2021/05/20

Vertical



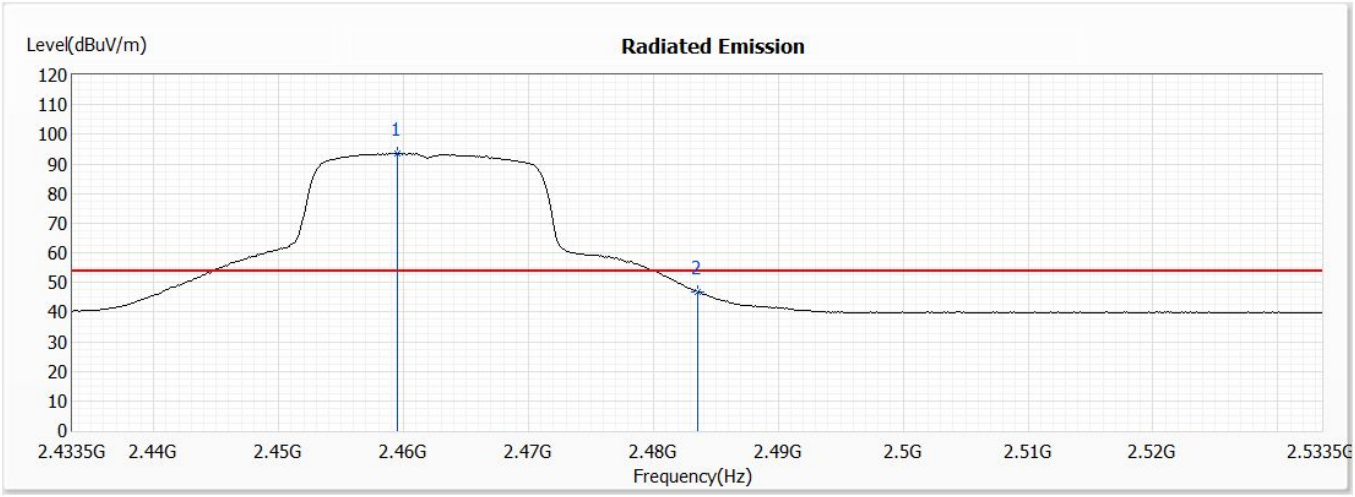
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2458.100	104.37	--	--	91.72	12.65	PK
2	2483.500	71.55	74.00	-2.45	58.82	12.73	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

Product	:	WCDMA/LTE/5G Mobile Phone
Test Item	:	Band Edge Data
Test Mode	:	Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW) (2462MHz)
Test Date	:	2021/05/20

Vertical



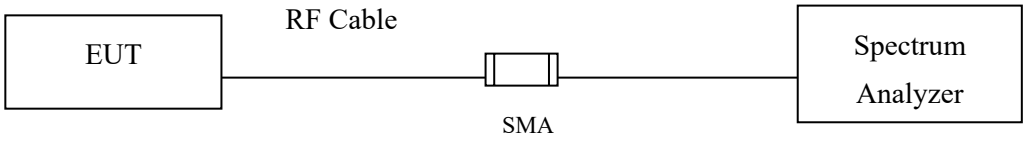
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2459.500	93.47	--	--	80.82	12.65	AV
2	2483.500	46.87	54.00	-7.13	34.14	12.73	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Emission Level = Reading Level + Correct Factor.

7. 6dB Bandwidth

7.1. Test Setup



7.2. Limits

The minimum bandwidth shall be at least 500 kHz.

7.3. Test Procedure

The EUT was setup according to ANSI C63.4, 2014; tested according to ANSI C63.10 Section 11.8 for compliance to FCC 47CFR 15.247 requirements.

7.4. Test Result of 6dB Bandwidth

Product : WCDMA/LTE/5G Mobile Phone
Test Item : 6dB Bandwidth Data
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	8140	>500	Pass
06	2437	9100	>500	Pass
11	2462	9100	>500	Pass

Figure Channel 01:

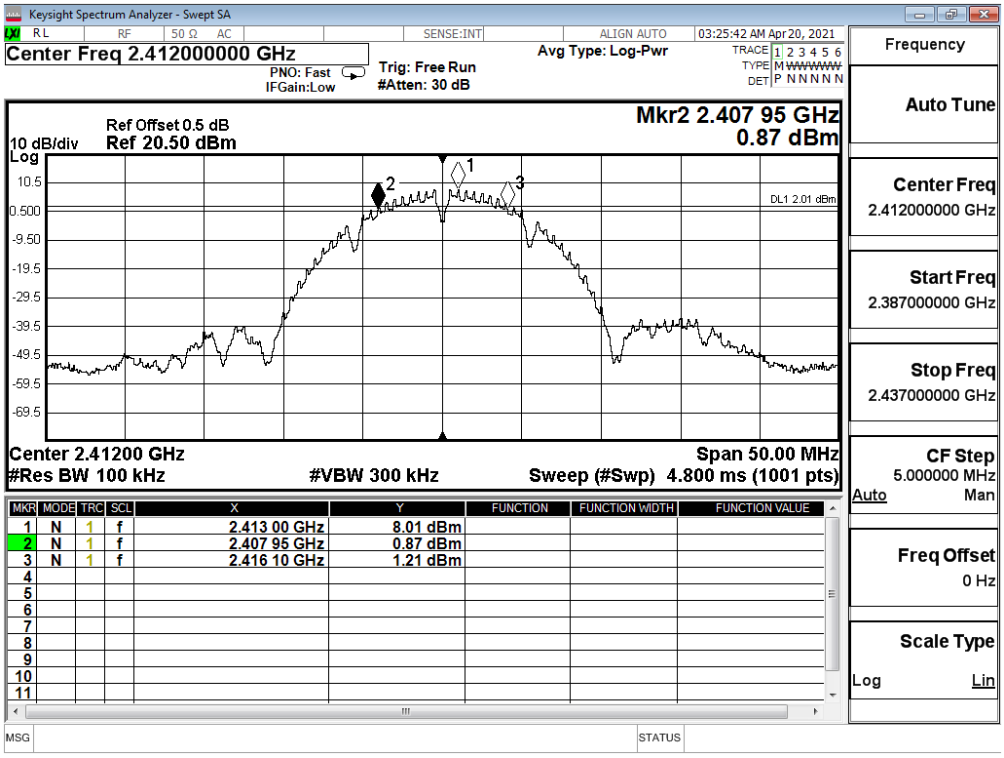


Figure Channel 06:

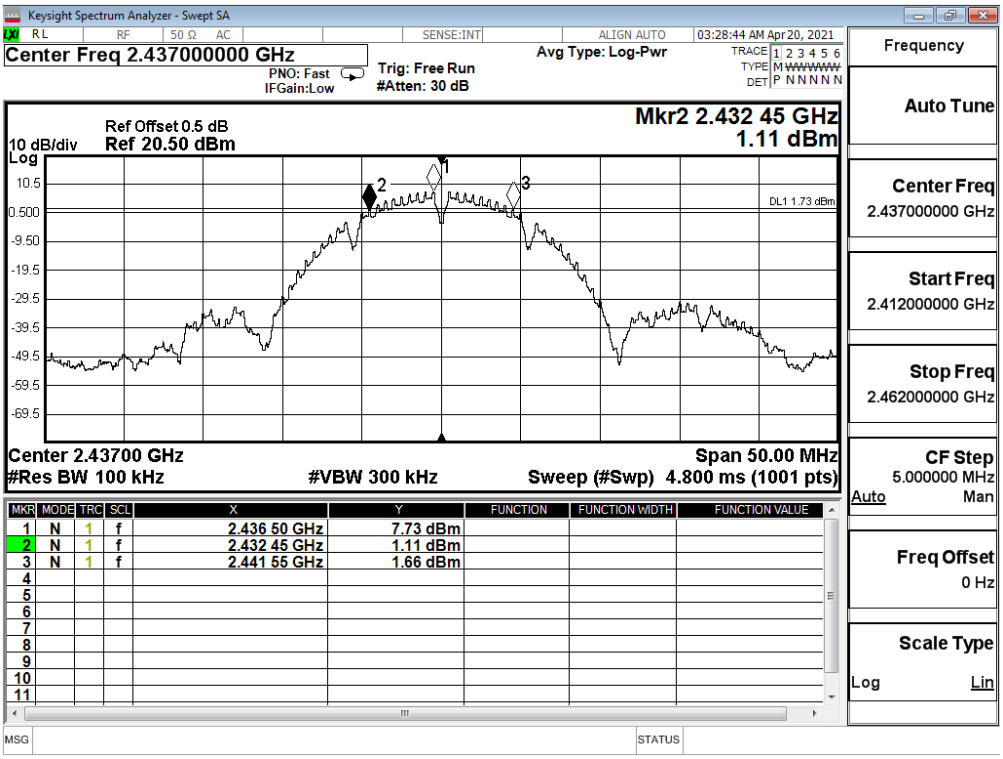
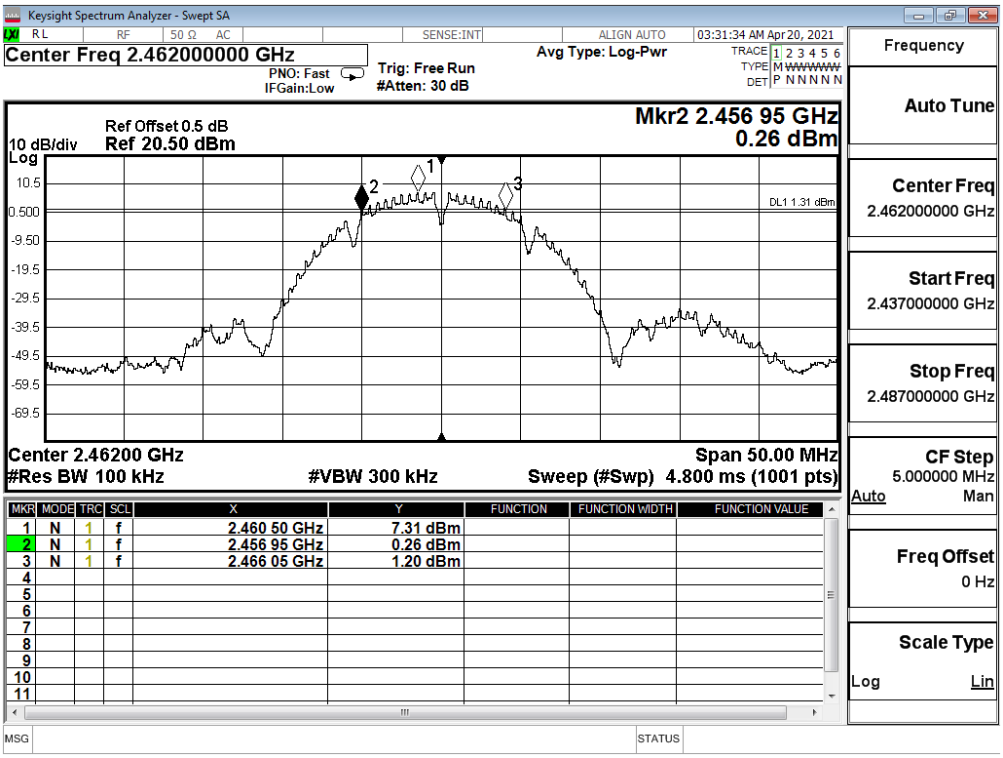


Figure Channel 11:



Product : WCDMA/LTE/5G Mobile Phone
Test Item : 6dB Bandwidth Data
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15200	>500	Pass
06	2437	15450	>500	Pass
11	2462	15950	>500	Pass

Figure Channel 01:

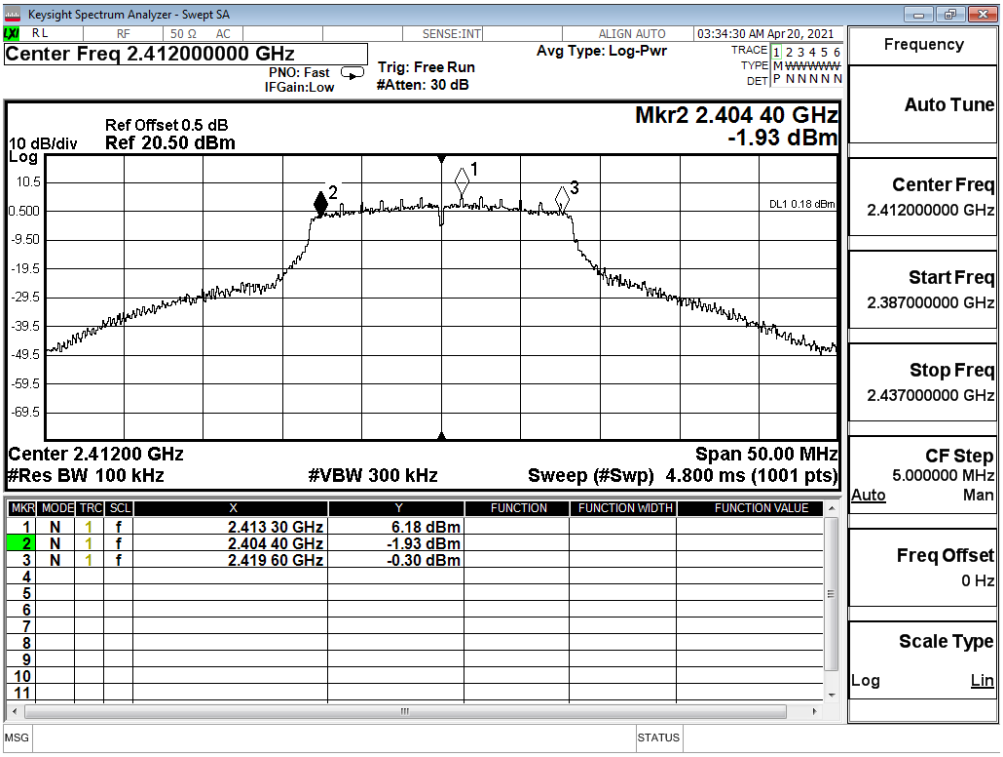


Figure Channel 06:

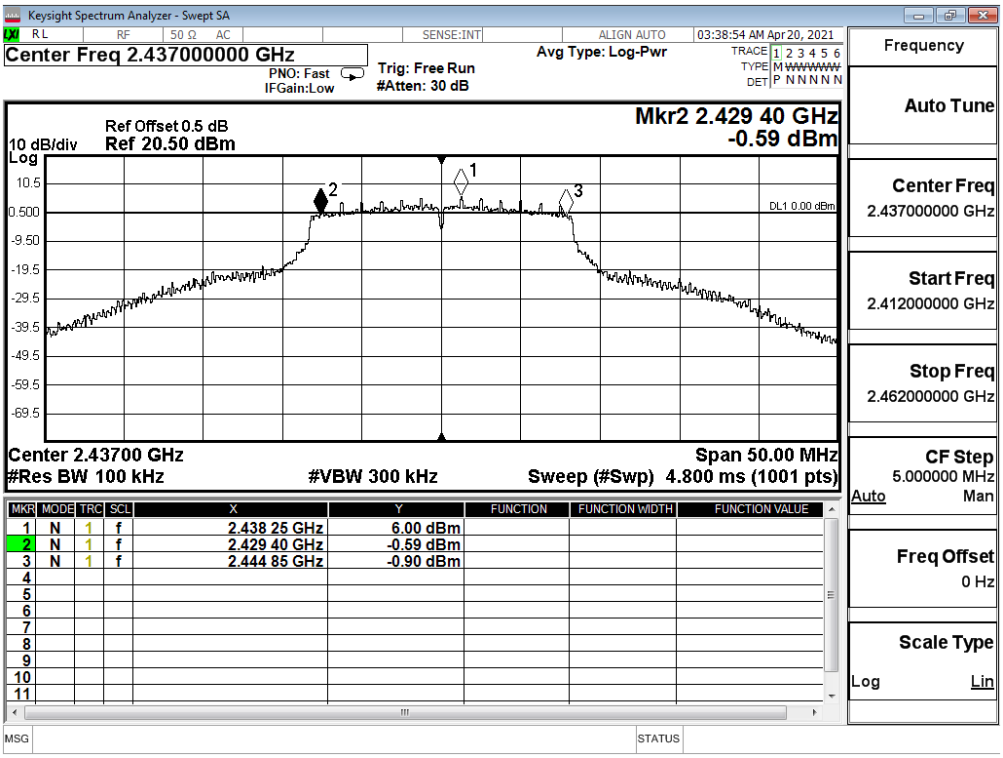
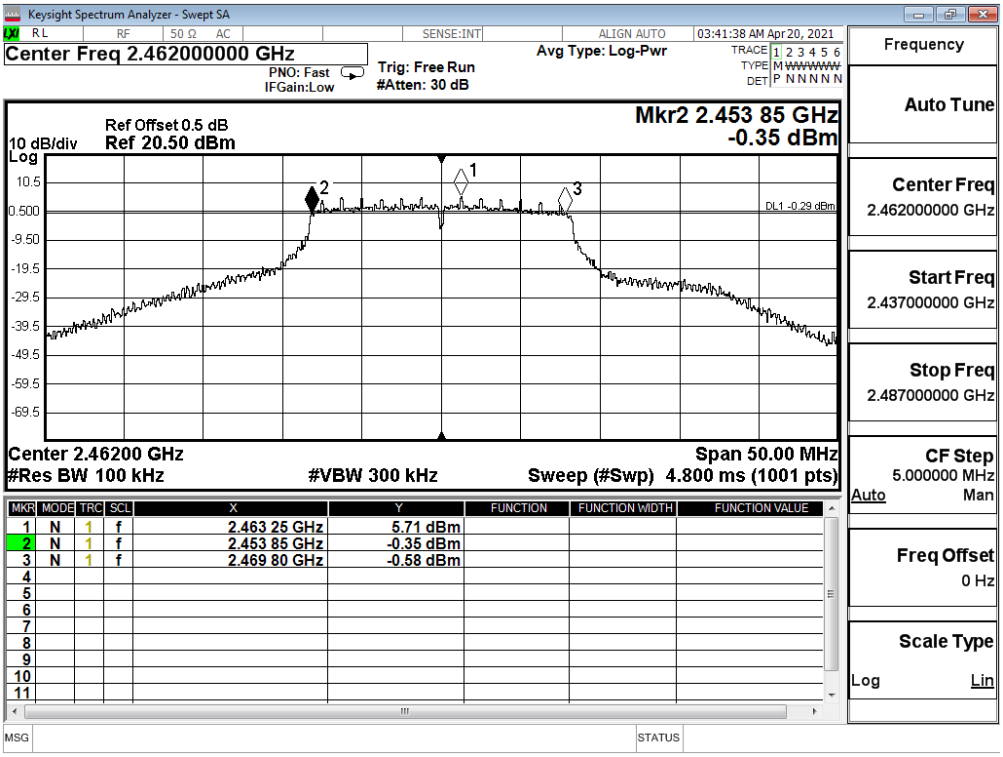


Figure Channel 11:



Product : WCDMA/LTE/5G Mobile Phone
Test Item : 6dB Bandwidth Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15200	>500	Pass
06	2437	16050	>500	Pass
11	2462	16600	>500	Pass

Figure Channel 01:

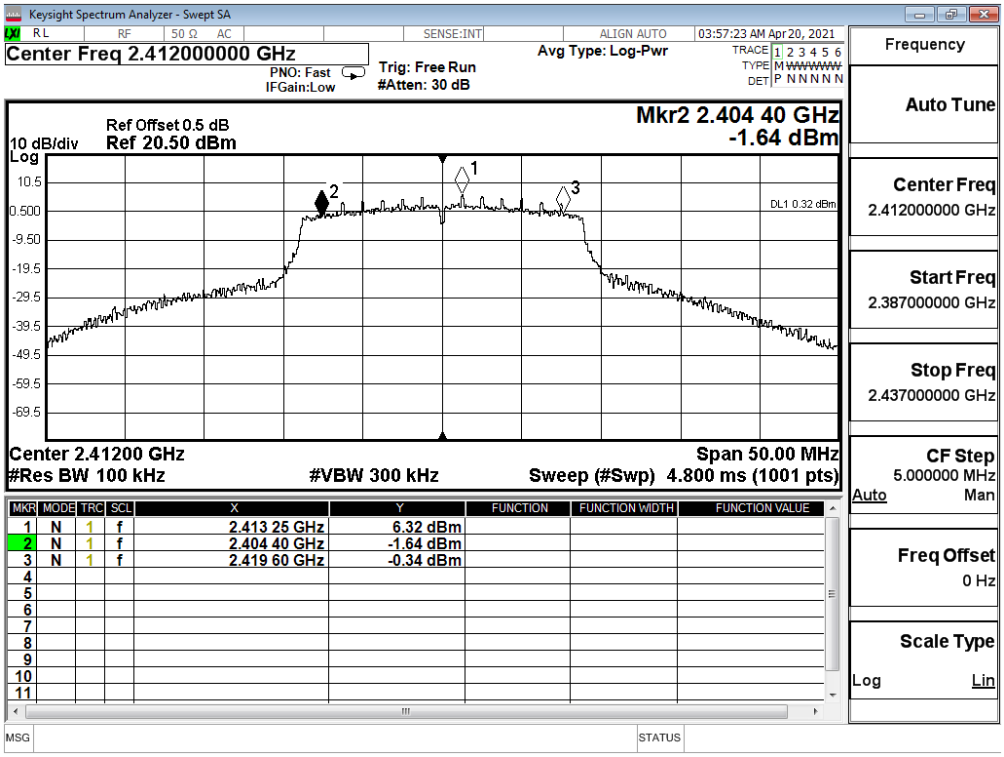


Figure Channel 06:

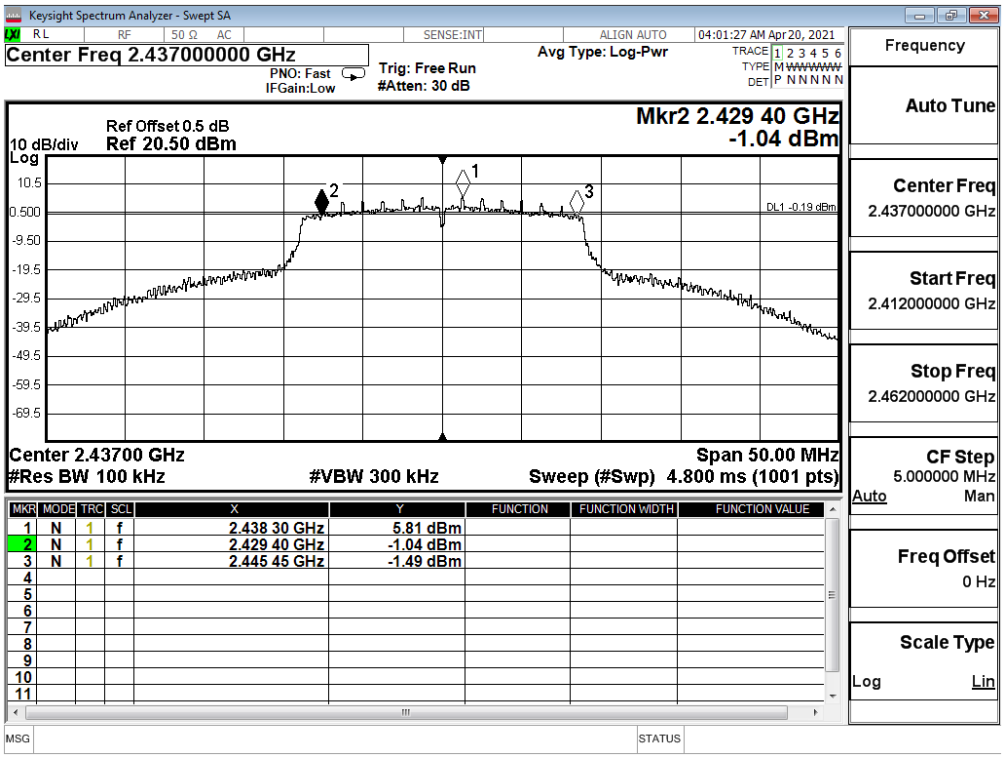
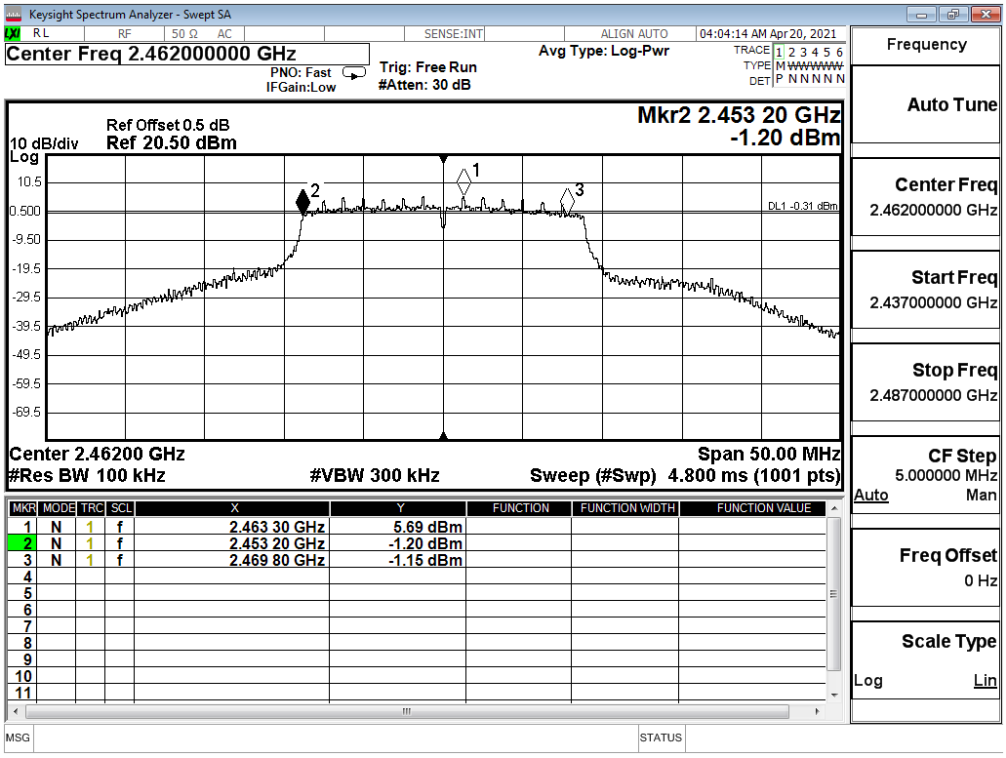
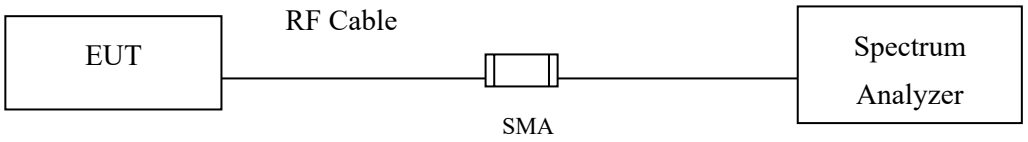


Figure Channel 11:



8. Power Density

8.1. Test Setup



8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
The maximum power spectral density using C63.10 Section 11.10.2 Method PKPSD (peak PSD)

8.4. Test Result of Power Density

Product : WCDMA/LTE/5G Mobile Phone
Test Item : Power Density Data
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	7.91	≦8dBm	Pass
06	2437	7.93	≦8dBm	Pass
11	2462	7.53	≦8dBm	Pass

Figure Channel 01:

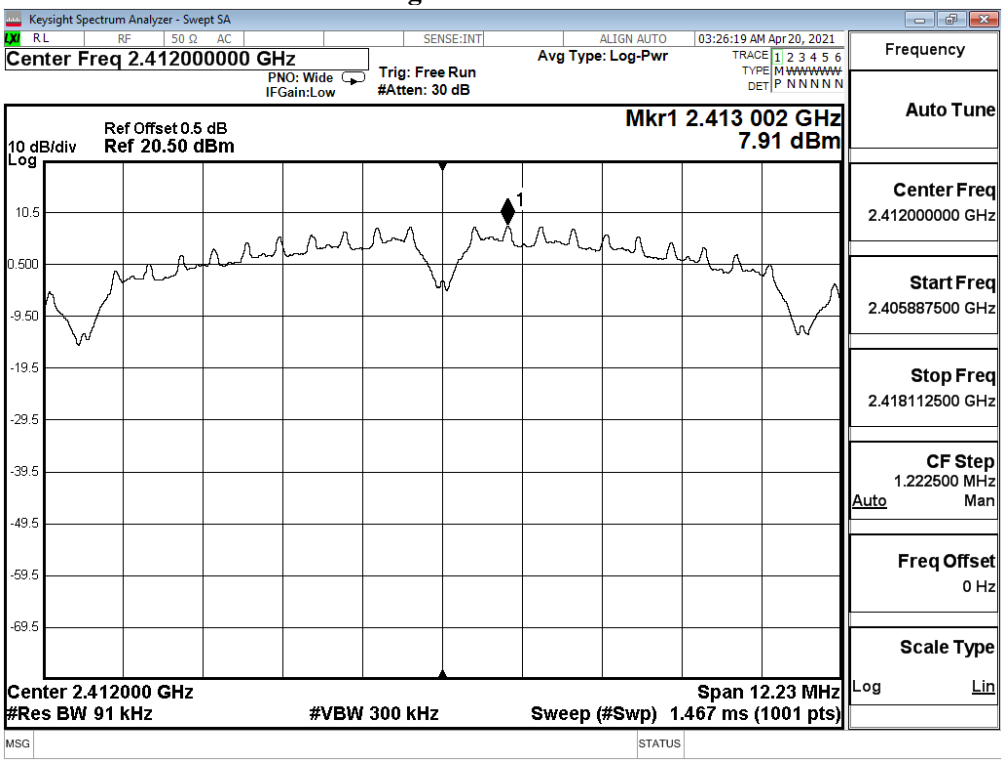


Figure Channel 06:

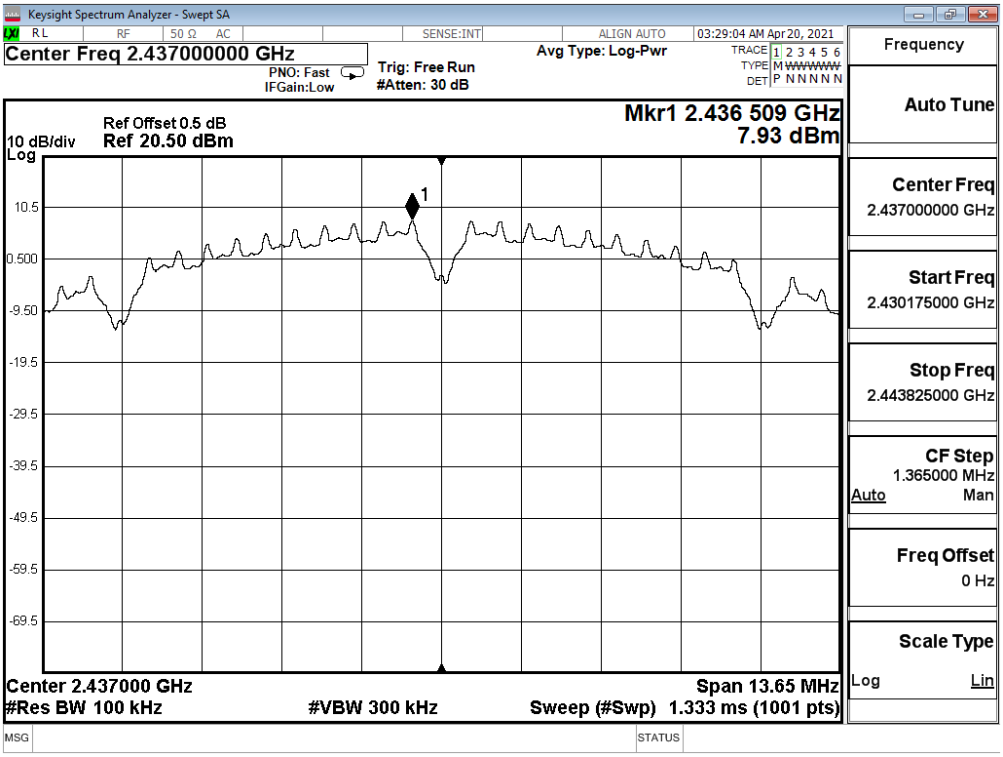
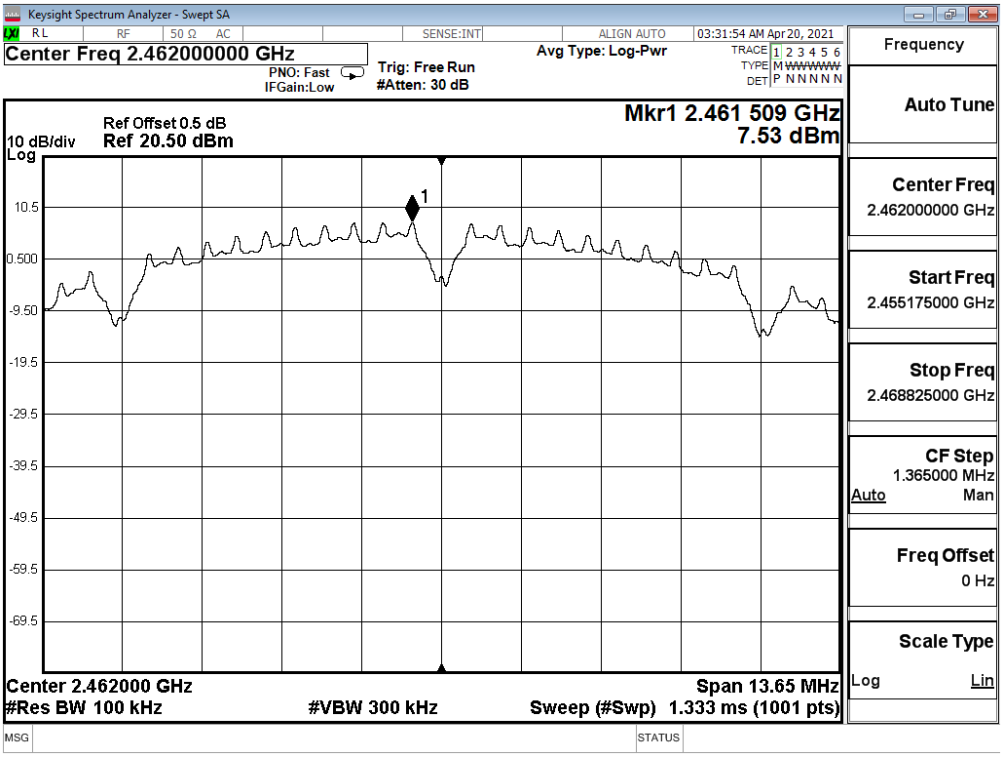


Figure Channel 11:



Product : WCDMA/LTE/5G Mobile Phone
Test Item : Power Density Data
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	6.21	≦8dBm	Pass
06	2437	5.98	≦8dBm	Pass
11	2462	5.69	≦8dBm	Pass

Figure Channel 01:

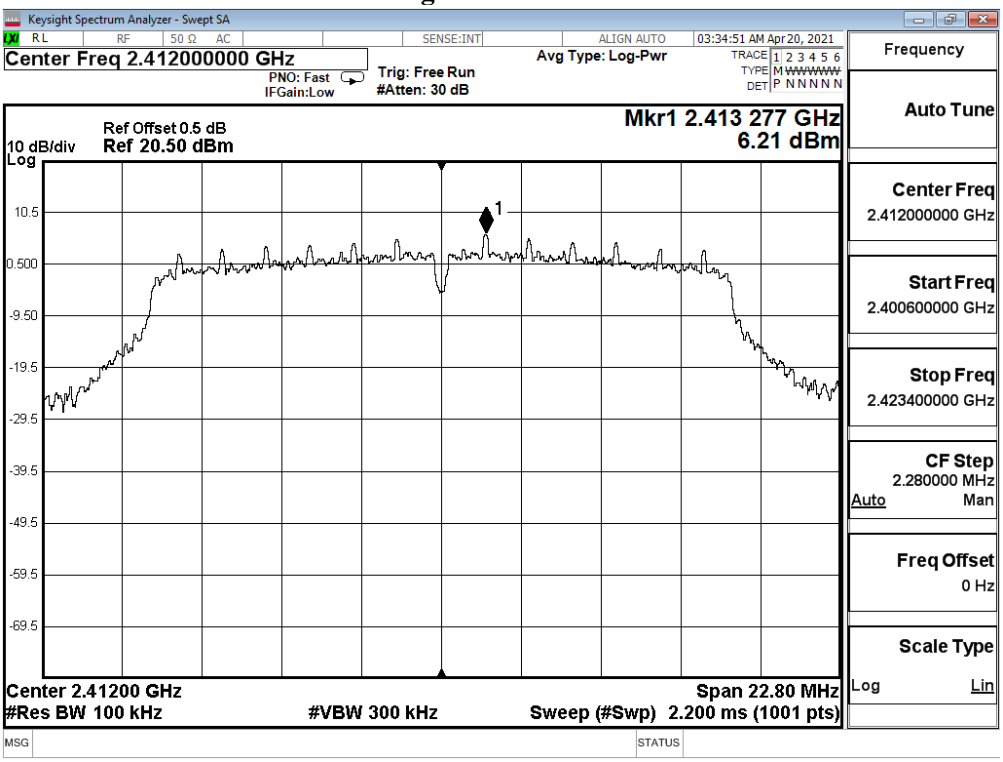


Figure Channel 06:

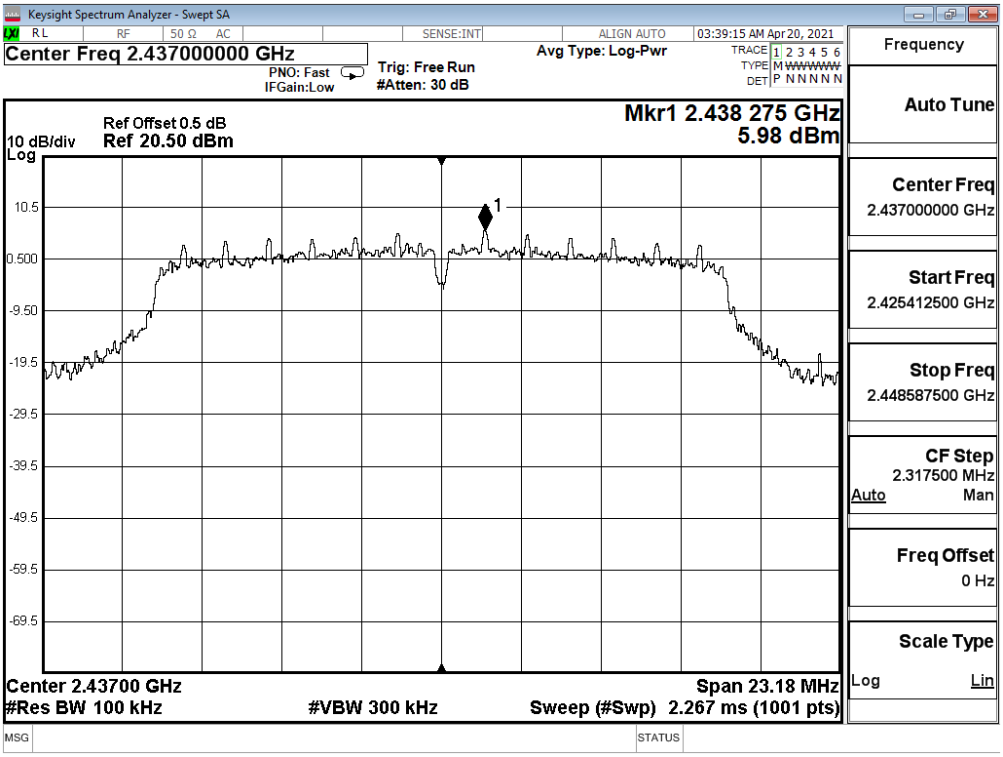
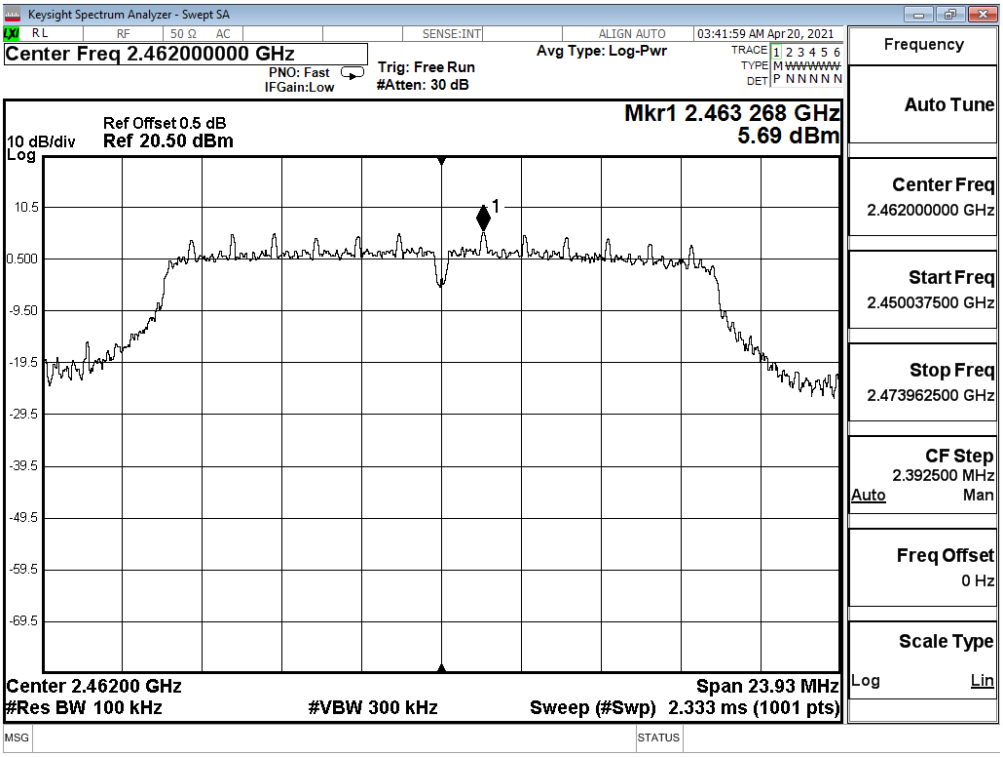


Figure Channel 11:



Product : WCDMA/LTE/5G Mobile Phone
Test Item : Power Density Data
Test Mode : Mode 3: Transmit (802.11ac VHT0 7.2Mbps 20M-BW)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
01	2412	6.32	≦8dBm	Pass
06	2437	6.05	≦8dBm	Pass
11	2462	5.75	≦8dBm	Pass

Figure Channel 01:

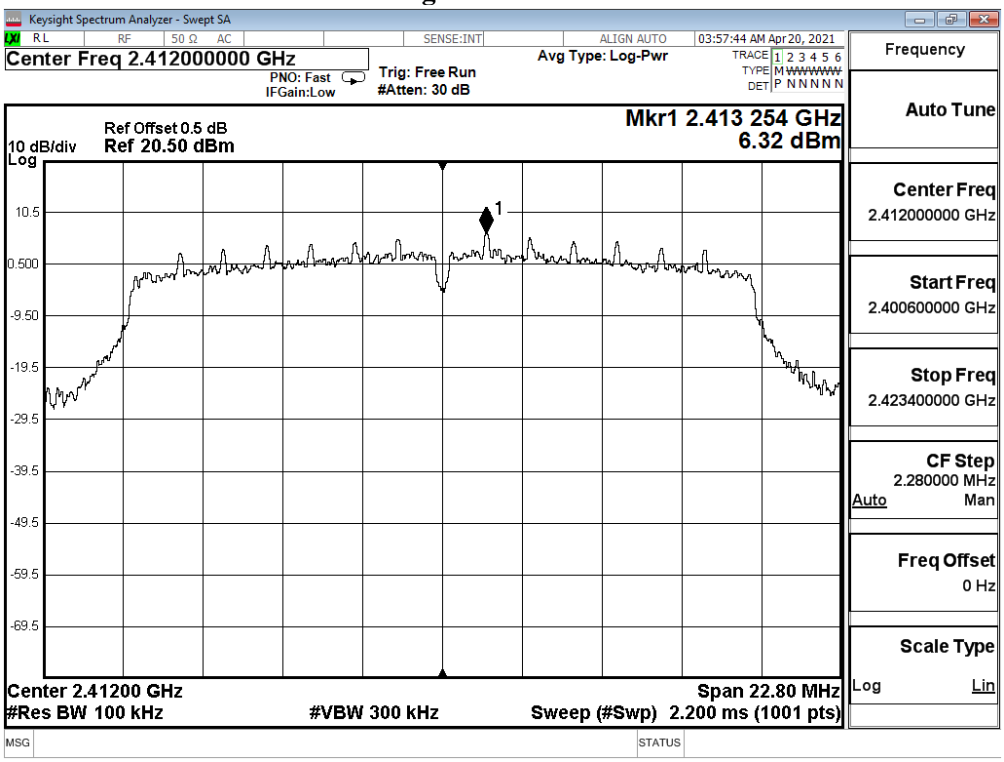


Figure Channel 06:

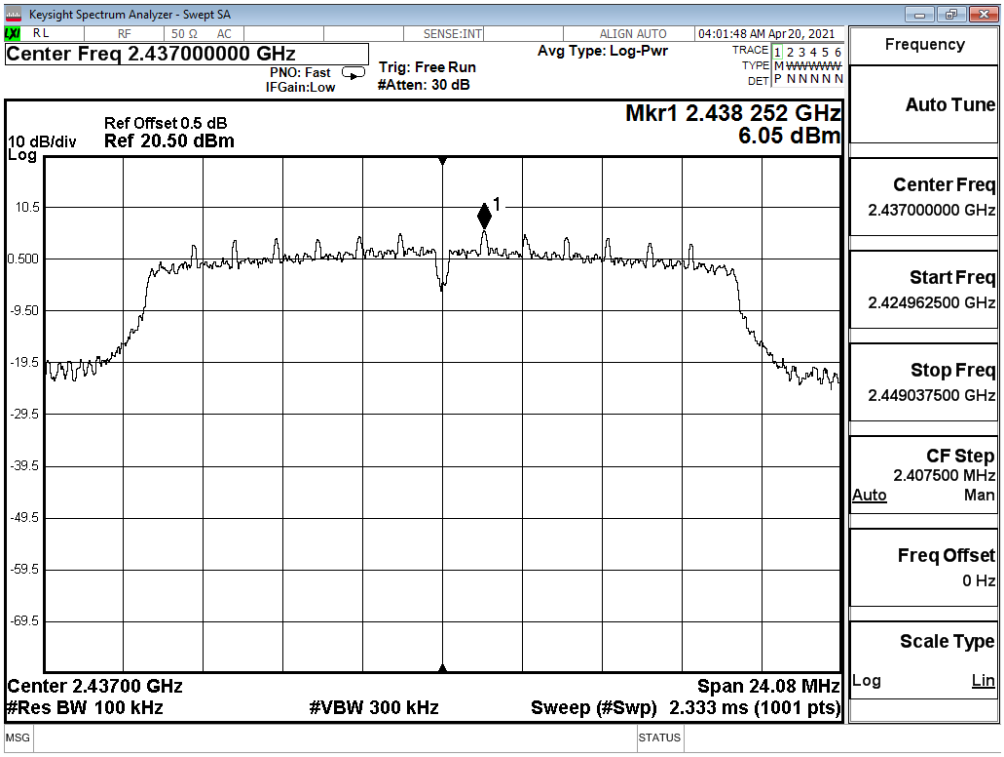
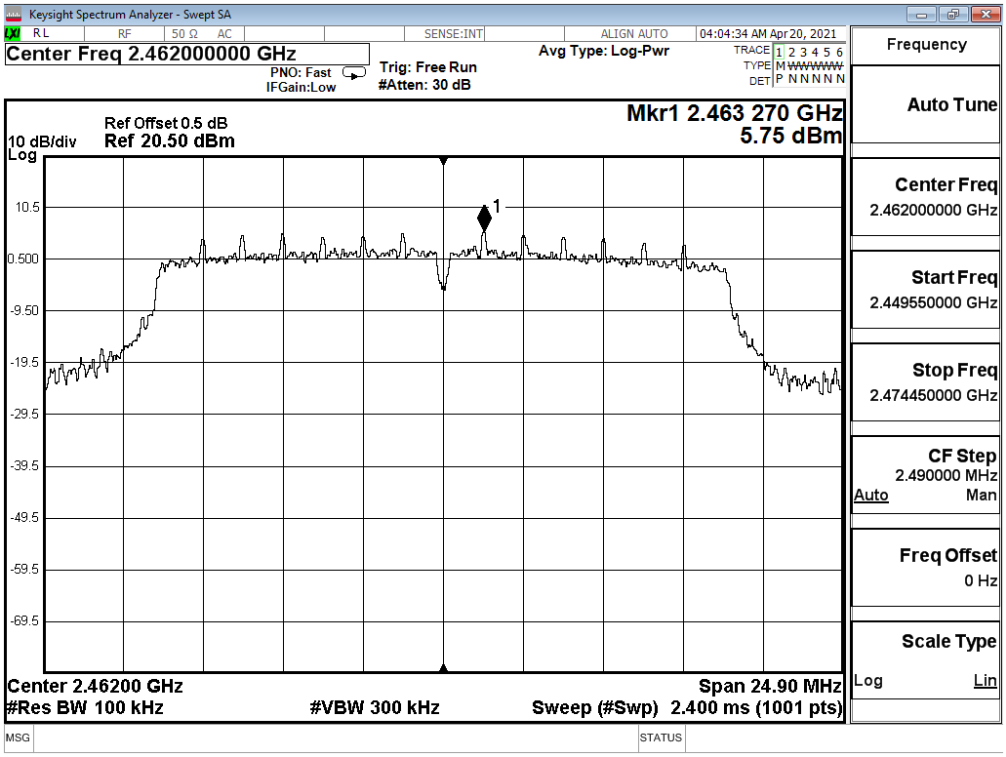
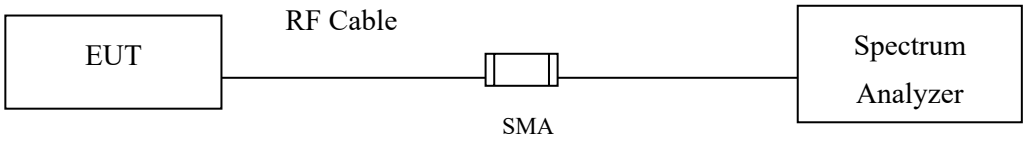


Figure Channel 11:



9. Duty Cycle

9.1. Test Setup



9.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to ANSI C63.10 2013 for compliance to FCC 47CFR 15.247 requirements.

9.3. Test Result of Duty Cycle

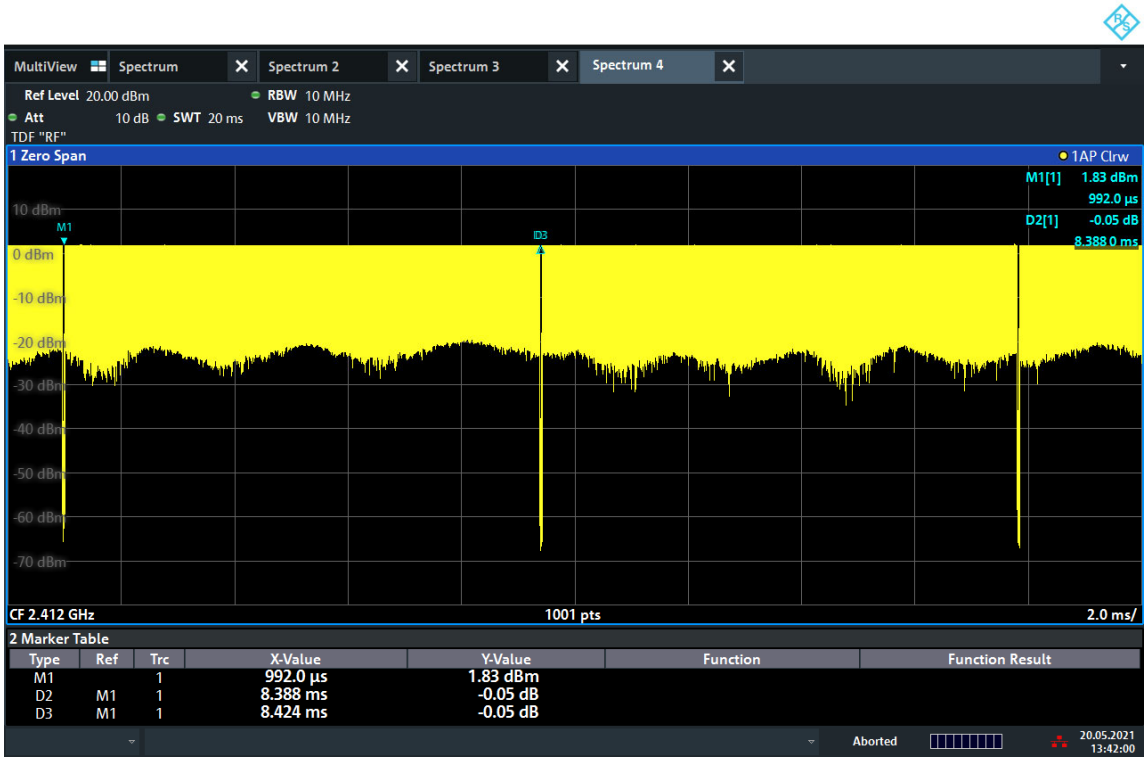
Product : WCDMA/LTE/5G Mobile Phone
Test Item : Duty Cycle
Test Mode : Transmit

Duty Cycle Formula:
Duty Cycle = Ton / (Ton + Toff)
Duty Factor = 10 Log (1/Duty Cycle)

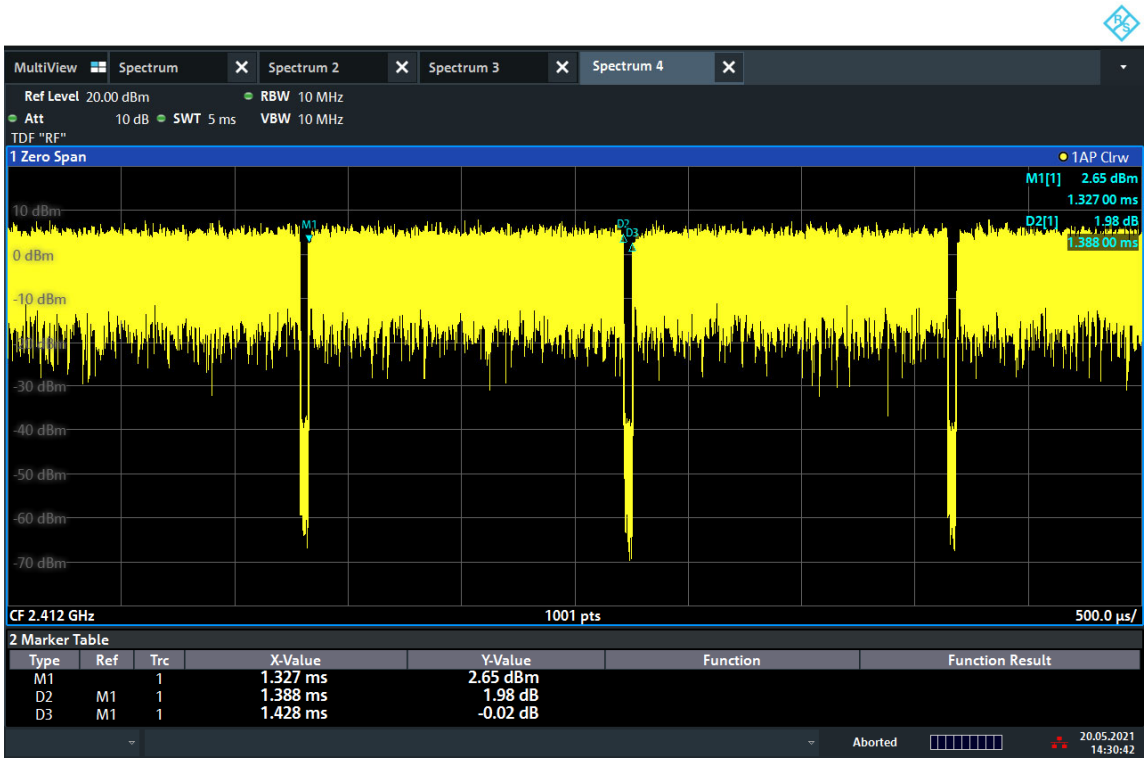
Results:

2.4GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11b	8.3880	8.4240	99.57	0.02
802.11g	1.3880	1.4280	97.20	0.12
802.11ac20	1.3138	1.3476	97.49	0.11

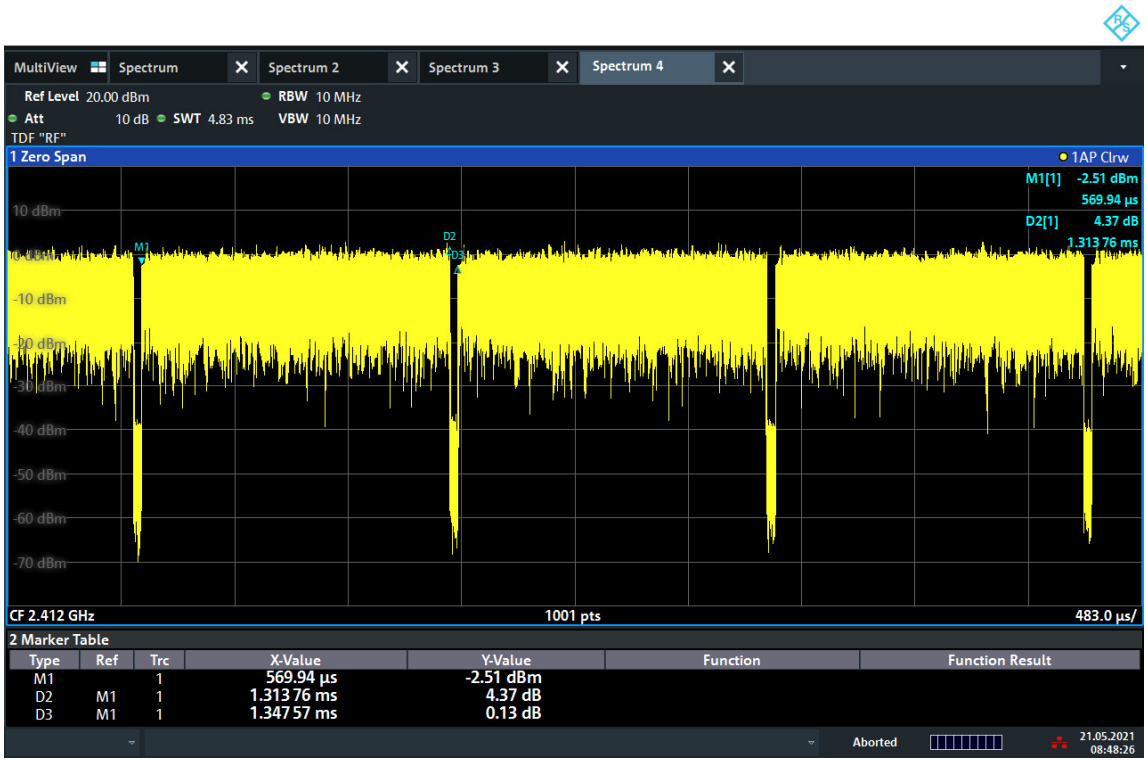
802.11b



802.11g



802.11ac20



10. EMI Reduction Method During Compliance Testing

No modification was made during testing.