

FCC Test Report

Product Name	Gaming headset
Model No.	ROG STRIX GO BT
FCC ID.	BJM-RSGB

Applicant	Tatung Company
Address	22 Chungshan N Road Sec 3 ,Taipei 10451,Taiwan

Date of Receipt	Sep. 30, 2020
Issued Date	Dec. 18, 2020
Report No.	2091003R-E3032110111
Report Version	V1.0



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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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

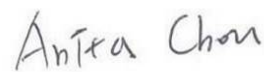
Issued Date: Dec. 18, 2020

Report No.: 2091003R-E3032110111



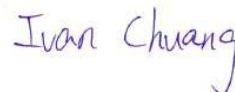
Product Name	Gaming headset
Applicant	Tatung Company
Address	22 Chungshan N Road Sec 3 ,Taipei 10451,Taiwan
Manufacturer	Tatung Company
Model No.	ROG STRIX GO BT
FCC ID.	BJM-RSGB
EUT Rated Voltage	DC 5V (Power by USB) or DC 3.7V (Power by battery)
EUT Test Voltage	DC 5V (Power by USB)
Trade Name	ASUS
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C ANSI C63.4: 2014, ANSI C63.10: 2013
Test Result	Complied

Documented By :



(Senior Engineering Adm. Specialist / Anita Chou)

Tested By :



(Senior Engineer / Ivan Chuang)

Approved By :



(Director / Vincent Lin)

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Revision History

Report No.	Version	Description	Issued Date
2091003R-E3032110111	V1.0	Initial issue of report.	Dec. 18, 2020

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Gaming headset
Trade Name	ASUS
Model No.	ROG STRIX GO BT
FCC ID.	BJM-RSGB
Frequency Range	2402 – 2480MHz
Channel Number	V2.1+EDR: 79CH V5.1: 40CH
Type of Modulation	V2.1+EDR: GFSK(1Mbps) / $\pi/4$ DQPSK(2Mbps) / 8DPSK(3Mbps) V5.1: GFSK
Antenna Type	PCB Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
Type C TO USB Cable	ASUS, ROG STRIX GO BT

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	ACX	QEC-1907094-A	PCB Antenna	3.1dBi for 2.4GHz

Note: The antenna of EUT conforms to FCC 15.203.

Center Frequency of Each Channel:

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

Center Frequency of Each Channel: (For V5.1)

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 01:	2404 MHz	Channel 02:	2406 MHz	Channel 03:	2408 MHz
Channel 04:	2410 MHz	Channel 05:	2412 MHz	Channel 06:	2414 MHz	Channel 07:	2416 MHz
Channel 08:	2418 MHz	Channel 09:	2420 MHz	Channel 10:	2422 MHz	Channel 11:	2424 MHz
Channel 12:	2426 MHz	Channel 13:	2428 MHz	Channel 14:	2430 MHz	Channel 15:	2432 MHz
Channel 16:	2434 MHz	Channel 17:	2436 MHz	Channel 18:	2438 MHz	Channel 19:	2440 MHz
Channel 20:	2442 MHz	Channel 21:	2444 MHz	Channel 22:	2446 MHz	Channel 23:	2448 MHz
Channel 24:	2450 MHz	Channel 25:	2452 MHz	Channel 26:	2454 MHz	Channel 27:	2456 MHz
Channel 28:	2458 MHz	Channel 29:	2460 MHz	Channel 30:	2462 MHz	Channel 31:	2464 MHz
Channel 32:	2466 MHz	Channel 33:	2468 MHz	Channel 34:	2470 MHz	Channel 35:	2472 MHz
Channel 36:	2474 MHz	Channel 37:	2476 MHz	Channel 38:	2478 MHz	Channel 39:	2480 MHz

Note:

1. The EUT is an Gaming headset with built-in Bluetooth transceiver.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. The test mode is based on the Bluetooth technology, while testing 1Mbps, 2Mbps and 3Mbps, the worst case is 1Mbps and 3Mbps, and only worse case data is recorded in this report.

Test Mode	Mode 1: Transmit - 1Mbps Mode 2: Transmit - 2Mbps Mode 3: Transmit - 3Mbps Mode 4: Transmit - 1Mbps-BLE Mode 5: Transmit - 2Mbps-BLE
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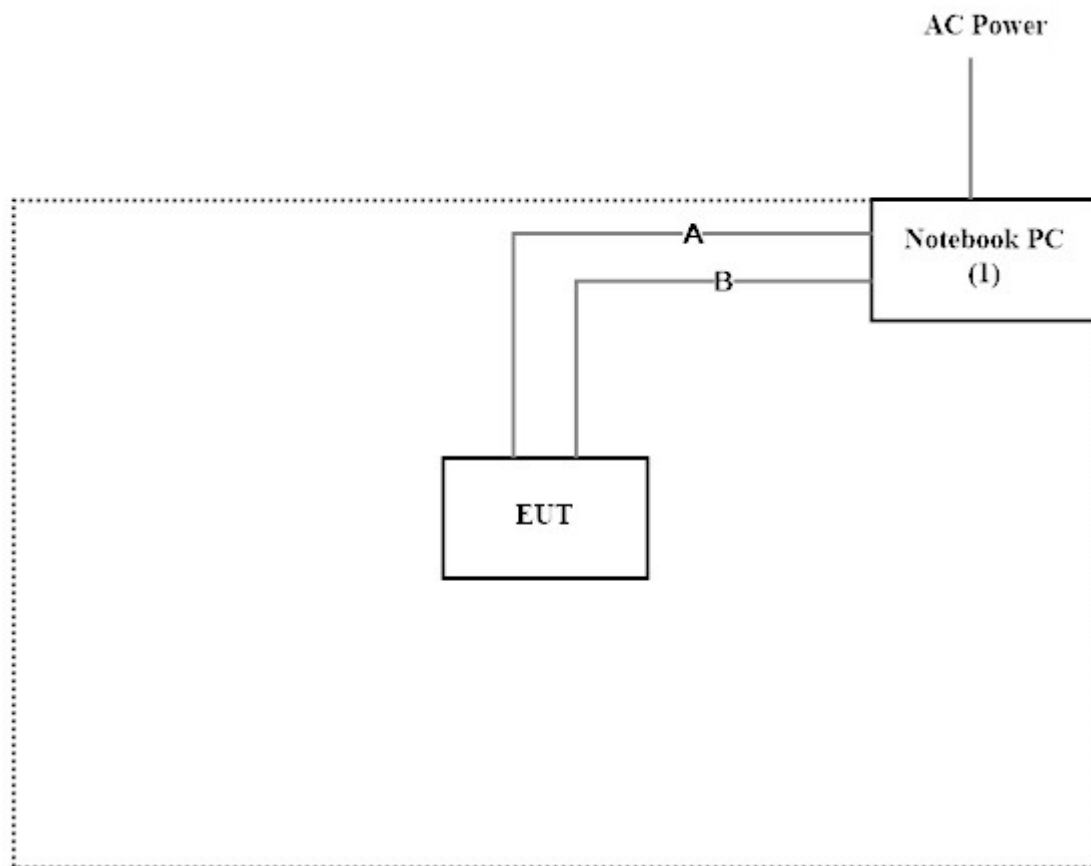
1.2. Tested System Details

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	Notebook PC	DELL	PP18L	42649348672	Non-Shielded, 0.8m

Signal Cable Type		Manufacturer	Model No.	Signal cable Description
A	Type C TO USB Cable	ASUS	ROG STRIX GO BT	Non-shielded, 1.0m
B	Earphone Cable	ASUS	ROG STRIX GO BT	Non-shielded, 1.5m

1.3. Configuration of Tested System



1.4. EUT Exercise Software

1. Setup the EUT as shown in Section 1.4.
2. Execute software “ Bluetooth: BlueTest3 ver. 3.2.0.898; BLE: BtCli ver. 3.2.0.898” 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	22 °C
	Humidity (%RH)	10~90 %	53.6 %
Radiated Emission	Temperature (°C)	10~40 °C	23.4 °C
	Humidity (%RH)	10~90 %	57 %
Conductive	Temperature (°C)	10~40 °C	24 °C
	Humidity (%RH)	10~90 %	58 %

USA : FCC Registration Number: TW0023

Canada : IC Registration Number: 25880

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan, R.O.C.
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 Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	101601	2020.05.28	2021.05.27
X	Two-Line V-Network	R&S	ENV216	101306	2020.03.25	2021.03.24
X	Two-Line V-Network	R&S	ENV216	101307	2020.04.17	2021.04.16
X	Coaxial Cable	DEKRA	RG400_BNC	RF001	2020.05.24	2021.05.23

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 /ASR2

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	Agilent	N9010A	MY55150401	2020/09/15	2021/09/14
X	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2020.05.13	2021.05.12
X	Power Sensor	KEYSIGHT	N1923A	MY59240002	2020.05.22	2021.05.21
X	Power Sensor	KEYSIGHT	N1923A	MY59240003	2020.05.22	2021.05.21

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 /ACB1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	AMETEK	HLA6121	49611	2020.03.16	2021.03.15
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-953	2020.01.03	2021.01.02
X	Horn Antenna	ETS-Lindgren	3117	00203761	2020.11.23	2021.11.22
X	Horn Antenna	Com-Power	AH-840	101087	2020.06.08	2021.06.07
X	Pre-Amplifier	EMCI	EMC001330	980316	2020.06.23	2021.06.22
X	Pre-Amplifier	EMCI	EMC051835SE	980312	2020.06.10	2021.06.09
	Pre-Amplifier	EMCI	EMC05820SE	980310	2020.06.24	2021.06.23
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2020.06.10	2021.06.09
X	Filter	MICRO TRONICS	BRM50702	G251	2020.09.17	2021.09.16
	Filter	MICRO TRONICS	BRM50716	G188	2020.09.17	2021.09.16
X	EMI Test Receiver	R&S	ESR7	101601	2020.05.28	2021.05.27
X	Spectrum Analyzer	R&S	FSV40	101148	2020.03.16	2021.03.15
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2020.07.03	2021.07.02
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.

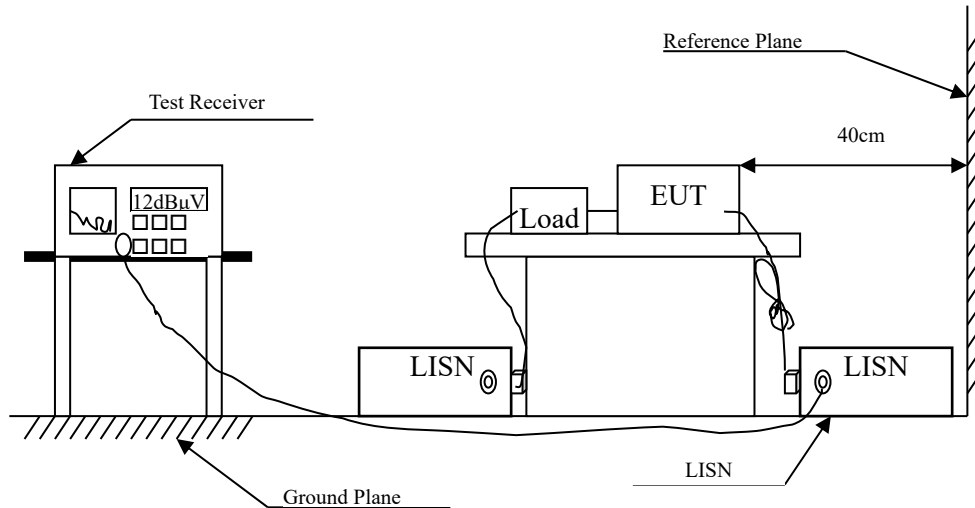
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

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	± 3.42 dB	
Peak Power Output	± 0.91 dB	
Radiated Emission	Under 1GHz ± 4.06 dB	Above 1GHz ± 3.73 dB
RF Antenna Conducted Test	± 2.53 dB	
Band Edge	Under 1GHz ± 4.06 dB	Above 1GHz ± 3.73 dB
Channel Number	N/A	
Channel Separation	± 682.83 Hz	
Dwell Time	± 2.31 ms	
Occupied Bandwidth	± 682.83 Hz	
Power Density	± 2.53 dB	
Duty Cycle	± 2.31 ms	

2. Conducted Emission

2.1. Test Setup



2.2. Limits

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

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and Peripherals 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 refer to the block diagram of the test setup and photographs.)

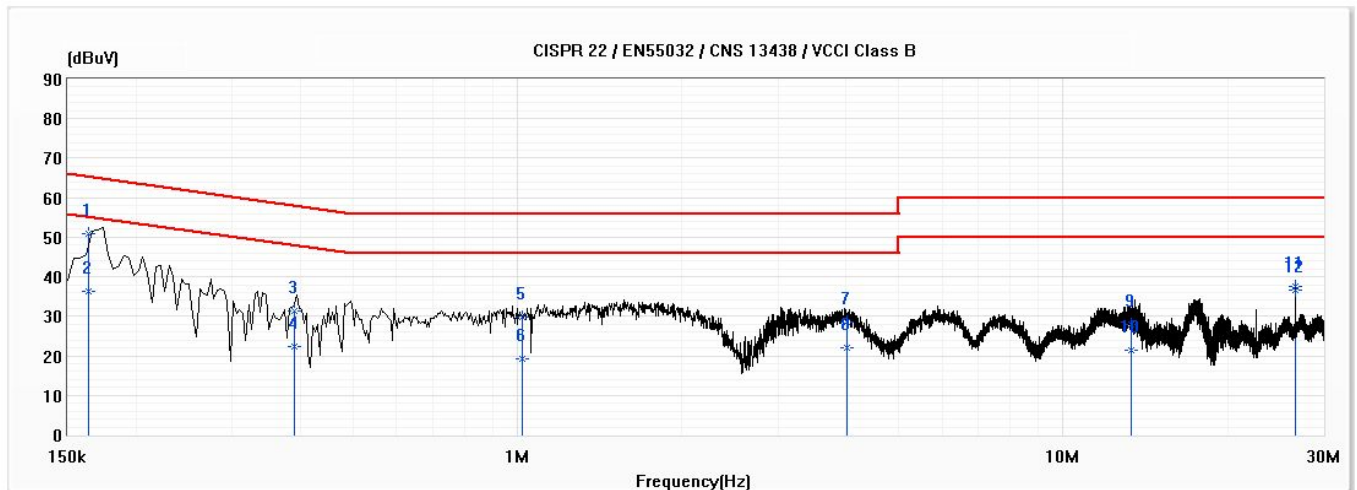
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT setup and the test procedure are according to ANSI C63.4, 2014 to comply with the requirements of FCC 47CFR Subpart C.

2.4. Test Result of Conducted Emission

Product : Gaming headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/04

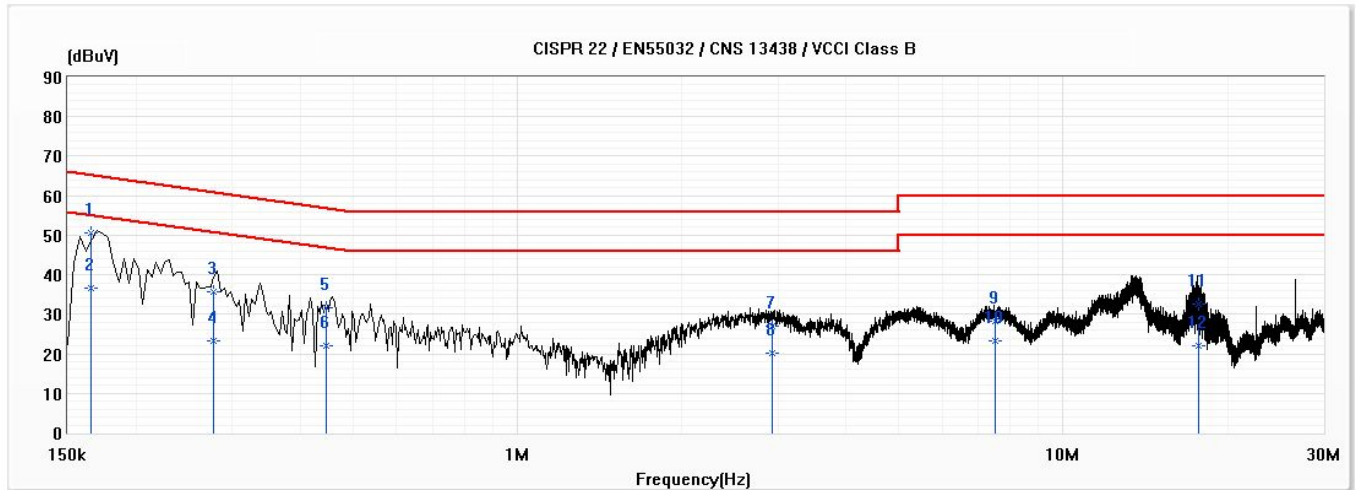


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.164	50.88	65.27	-14.40	41.22	9.66	QP
2	0.164	36.30	55.27	-18.97	26.64	9.66	AV
3	0.391	31.33	58.04	-26.71	21.67	9.66	QP
4	0.391	22.35	48.04	-25.69	12.70	9.66	AV
5	1.020	29.64	56.00	-26.36	19.95	9.69	QP
6	1.020	19.16	46.00	-26.84	9.47	9.69	AV
7	4.009	28.64	56.00	-27.36	18.87	9.77	QP
8	4.009	21.89	46.00	-24.11	12.12	9.77	AV
9	13.292	27.89	60.00	-32.11	17.97	9.93	QP
10	13.292	21.54	50.00	-28.46	11.61	9.93	AV
11	26.624	37.53	60.00	-22.47	27.57	9.96	QP
*12	26.624	36.71	50.00	-13.29	26.75	9.96	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Gaming headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/04

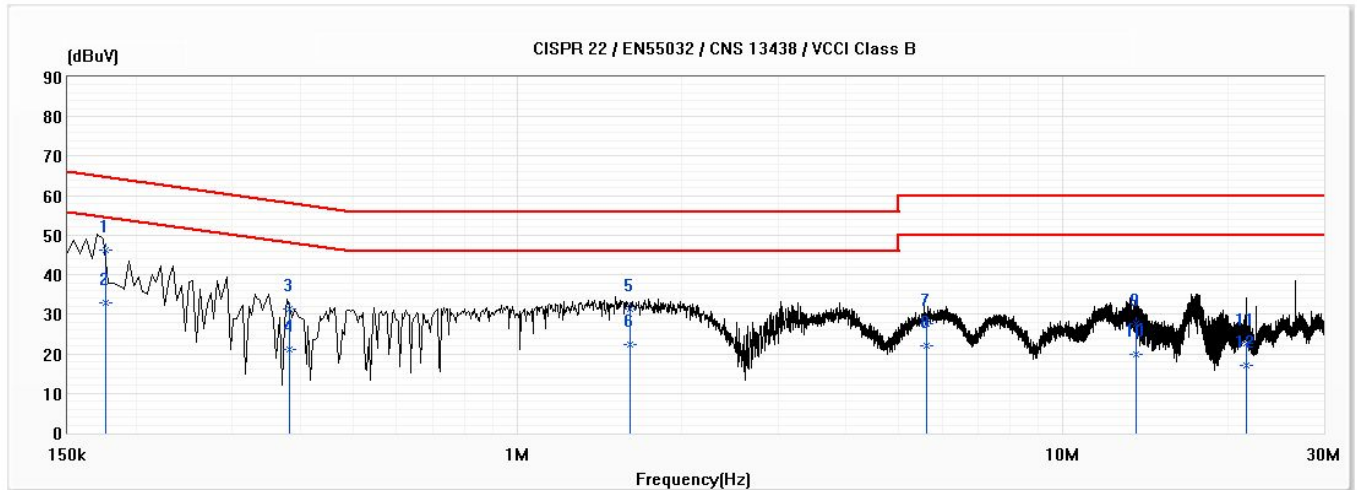


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.165	50.48	65.19	-14.71	40.81	9.67	QP
2	0.165	36.61	55.19	-18.58	26.94	9.67	AV
3	0.277	35.64	60.91	-25.27	25.97	9.67	QP
4	0.277	23.19	50.91	-27.72	13.52	9.67	AV
5	0.447	31.51	56.93	-25.42	21.84	9.67	QP
6	0.447	22.15	46.93	-24.77	12.49	9.67	AV
7	2.930	27.12	56.00	-28.88	17.37	9.75	QP
8	2.930	20.13	46.00	-25.87	10.37	9.75	AV
9	7.499	28.26	60.00	-31.74	18.40	9.85	QP
10	7.499	23.19	50.00	-26.81	13.33	9.85	AV
11	17.711	32.66	60.00	-27.34	22.64	10.03	QP
12	17.711	22.06	50.00	-27.94	12.03	10.03	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Gaming headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/04

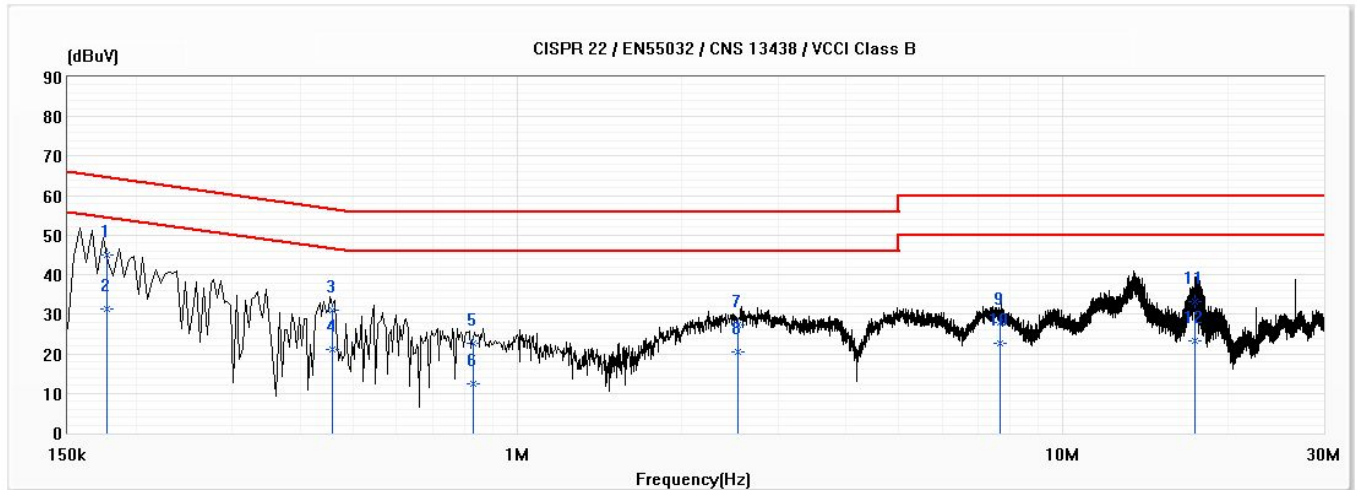


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.176	46.37	64.68	-18.31	36.71	9.65	QP
2	0.176	32.95	54.68	-21.73	23.29	9.65	AV
3	0.382	31.21	58.24	-27.02	21.56	9.66	QP
4	0.382	21.21	48.24	-27.03	11.55	9.66	AV
5	1.611	31.19	56.00	-24.81	21.48	9.71	QP
6	1.611	22.19	46.00	-23.81	12.48	9.71	AV
7	5.628	27.53	60.00	-32.47	17.72	9.81	QP
8	5.628	21.96	50.00	-28.04	12.15	9.81	AV
9	13.631	27.53	60.00	-32.47	17.60	9.93	QP
10	13.631	19.85	50.00	-30.15	9.92	9.93	AV
11	21.707	22.70	60.00	-37.30	12.74	9.97	QP
12	21.707	17.06	50.00	-32.94	7.09	9.97	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Gaming headset
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/04



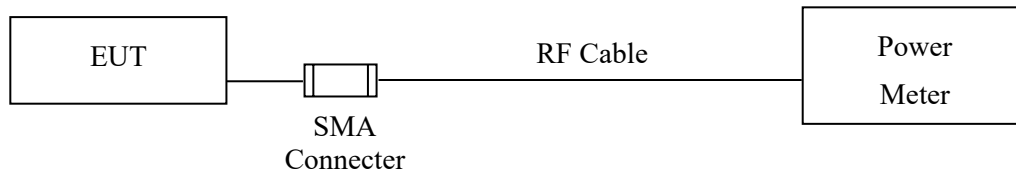
No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
*1	0.177	45.08	64.65	-19.57	35.41	9.67	QP
2	0.177	31.23	54.65	-23.41	21.56	9.67	AV
3	0.457	30.95	56.74	-25.79	21.28	9.67	QP
4	0.457	21.25	46.74	-25.49	11.58	9.67	AV
5	0.831	22.76	56.00	-33.24	13.07	9.68	QP
6	0.831	12.53	46.00	-33.47	2.85	9.68	AV
7	2.541	27.35	56.00	-28.65	17.60	9.74	QP
8	2.541	20.38	46.00	-25.62	10.64	9.74	AV
9	7.654	28.04	60.00	-31.96	18.18	9.87	QP
10	7.654	22.72	50.00	-27.28	12.86	9.87	AV
11	17.416	33.20	60.00	-26.80	23.18	10.02	QP
12	17.416	23.19	50.00	-26.81	13.16	10.02	AV

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ * “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Setup



3.2. Limit

The maximum peak power shall be less 1Watt.

3.3. Test Procedure

Tested according to FHSS test procedure of KDB 558074 section 9 (b for compliance to FCC 47CFR 15.247 requirements.

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.

3.4. Test Result of Peak Power Output

Product : Gaming headset
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2020/10/28

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	2.12	1 Watt= 30 dBm	Pass
Channel 39	2441.00	2.29	1 Watt= 30 dBm	Pass
Channel 78	2480.00	2.34	1 Watt= 30 dBm	Pass

Product : Gaming headset
Test Item : Peak Power Output
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2020/10/28

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	2.12	1 Watt= 30 dBm	Pass
Channel 39	2441.00	2.20	1 Watt= 30 dBm	Pass
Channel 78	2480.00	2.22	1 Watt= 30 dBm	Pass

Product : Gaming headset
Test Item : Peak Power Output
Test Mode : Mode 4: Transmit - 1Mbps-BLE
Test Date : 2020/10/28

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	-2.52	1 Watt= 30 dBm	Pass
Channel 19	2440.00	-2.30	1 Watt= 30 dBm	Pass
Channel 39	2480.00	-2.14	1 Watt= 30 dBm	Pass

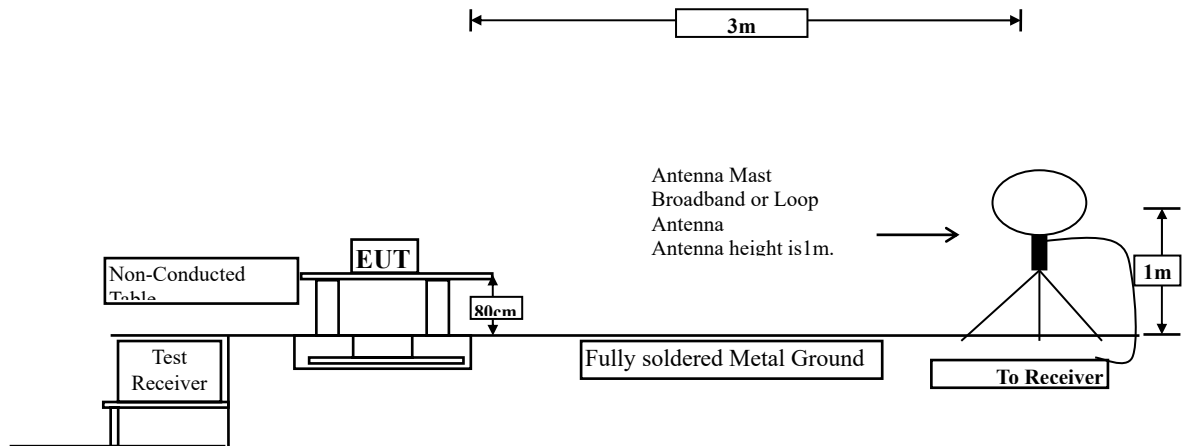
Product : Gaming headset
Test Item : Peak Power Output
Test Mode : Mode 5: Transmit - 2Mbps-BLE
Test Date : 2020/10/28

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
Channel 00	2402.00	-2.52	1 Watt= 30 dBm	Pass
Channel 19	2440.00	-2.27	1 Watt= 30 dBm	Pass
Channel 39	2480.00	-2.16	1 Watt= 30 dBm	Pass

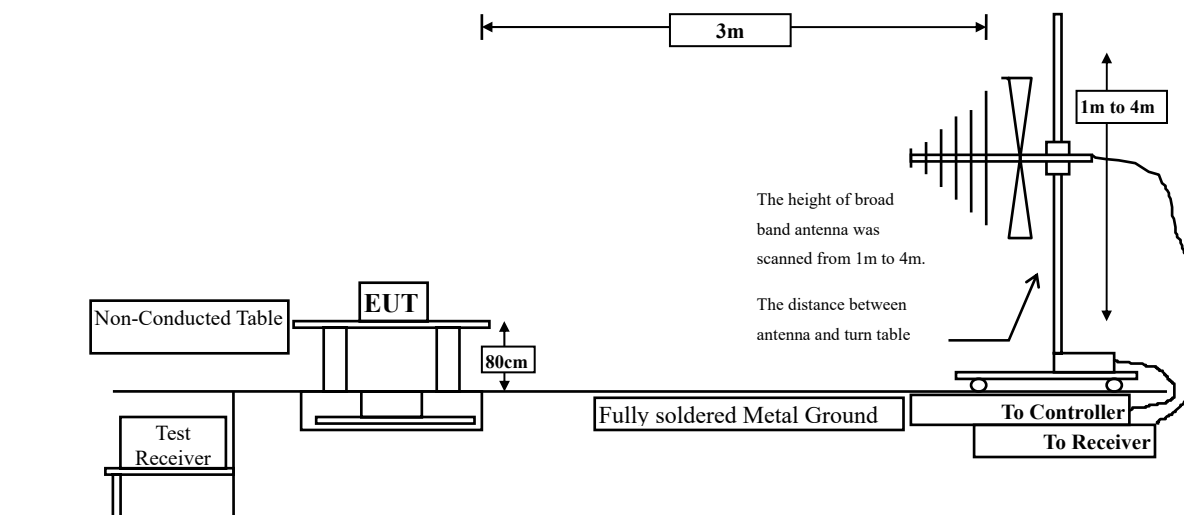
4. Radiated Emission

4.1. Test Setup

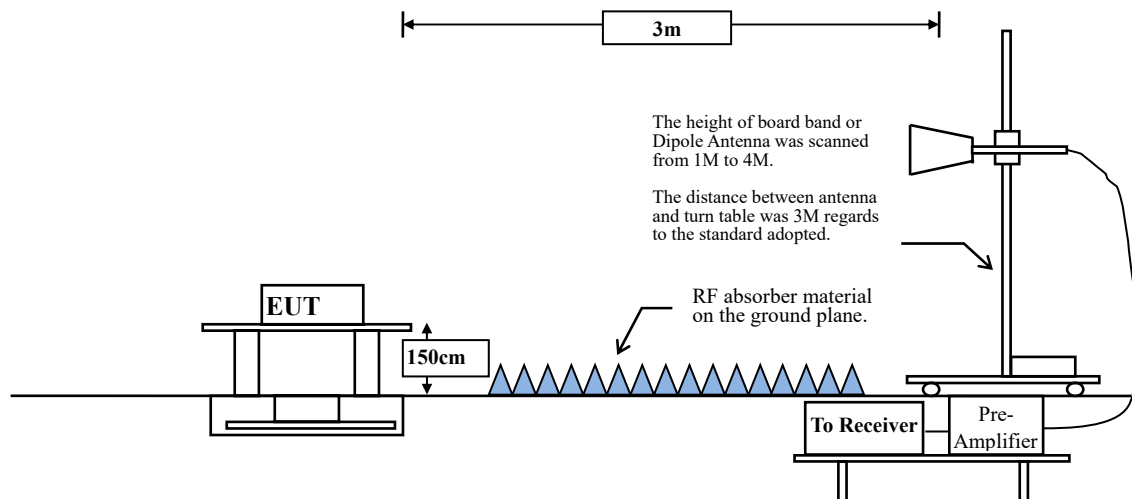
Radiated Emission Under 30MHz



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 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 from 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.

$VBW \geq 3 \times RBW$.

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 $\geq 98\%$

$VBW \geq 1/T$, 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)
BLE 1Mbps	85.46	2.1304	469	500
BLE 2Mbps	57.85	1.0844	922	1k

Note: Duty Cycle Refer to Section 11

4.4. Uncertainty

Horizontal polarization :

30-300MHz: $\pm 4.08\text{dB}$; 300M-1GHz: $\pm 3.86\text{dB}$; 1-18GHz: $\pm 3.77\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$

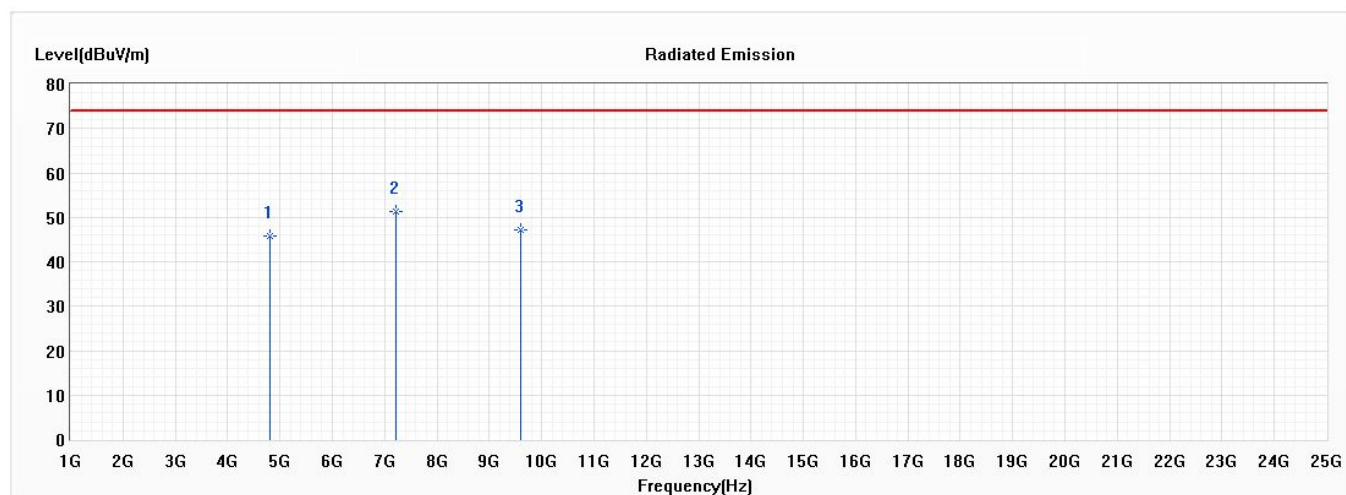
Vertical polarization :

30-300MHz: $\pm 4.81\text{dB}$; 300M-1GHz: $\pm 3.87\text{dB}$; 1-18GHz : $\pm 3.83\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$

4.5. Test Result of Radiated Emission

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2402MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	45.82	74.00	-28.18	50.09	-4.27	PK
* 2	7206.000	51.30	74.00	-22.70	51.98	-0.68	PK
3	9608.000	47.11	74.00	-26.89	45.16	1.95	PK

Note:

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

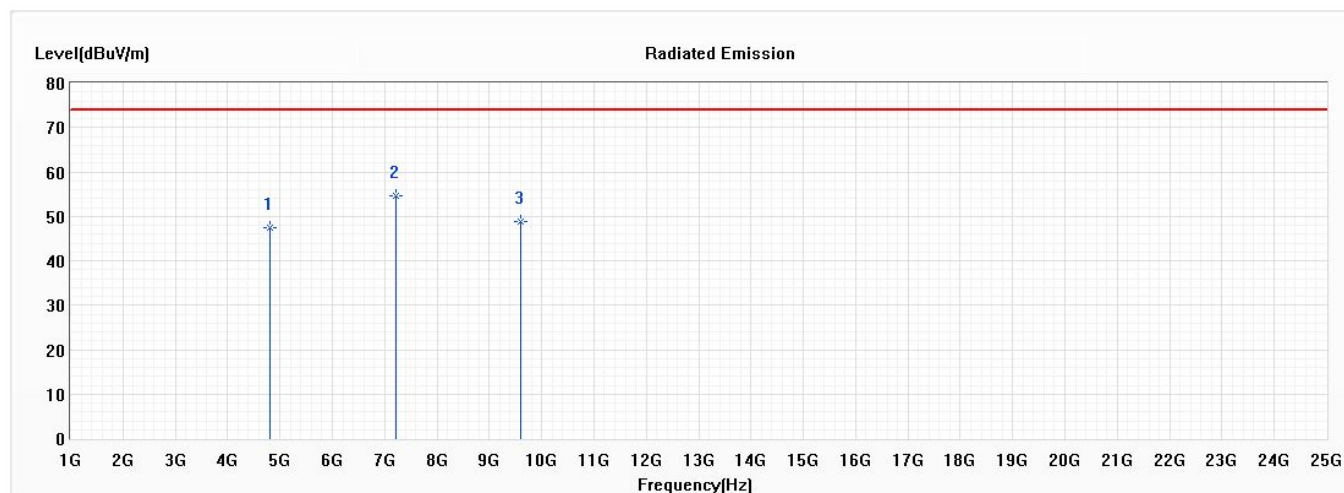
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2402MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	47.39	74.00	-26.61	51.66	-4.27	PK
* 2	7206.000	54.54	74.00	-19.46	55.22	-0.68	PK
3	9608.000	48.91	74.00	-25.09	46.96	1.95	PK

Note:

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

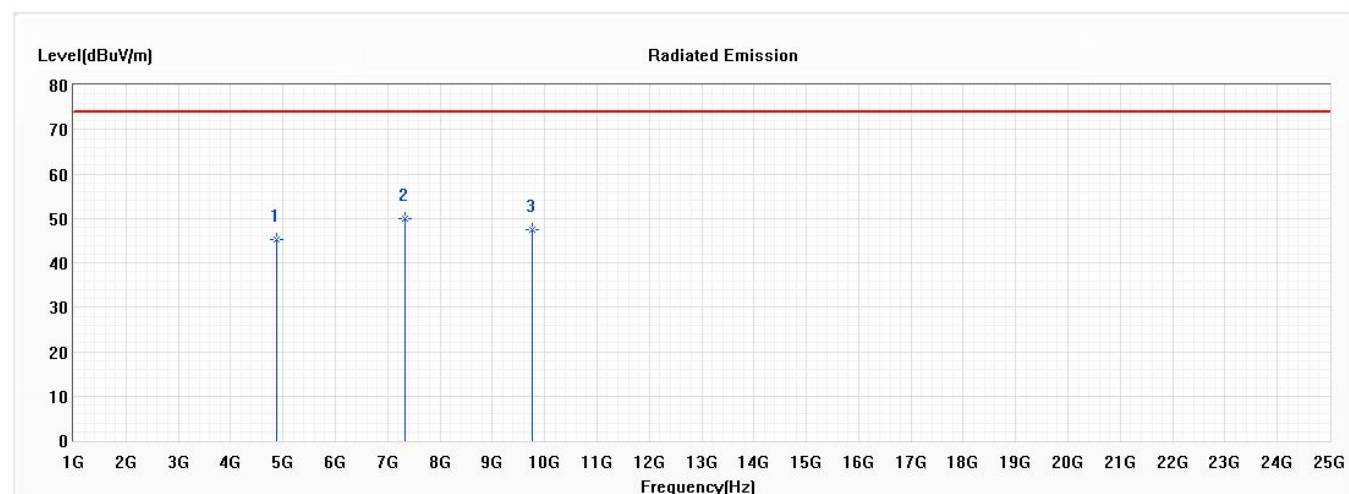
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
7206.000	54.54	-30.752	23.788	-30.212	74.000	54.000

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2441MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	45.18	74.00	-28.82	49.51	-4.33	PK
* 2	7323.000	49.87	74.00	-24.13	50.57	-0.70	PK
3	9764.000	47.55	74.00	-26.45	45.53	2.02	PK

Note:

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

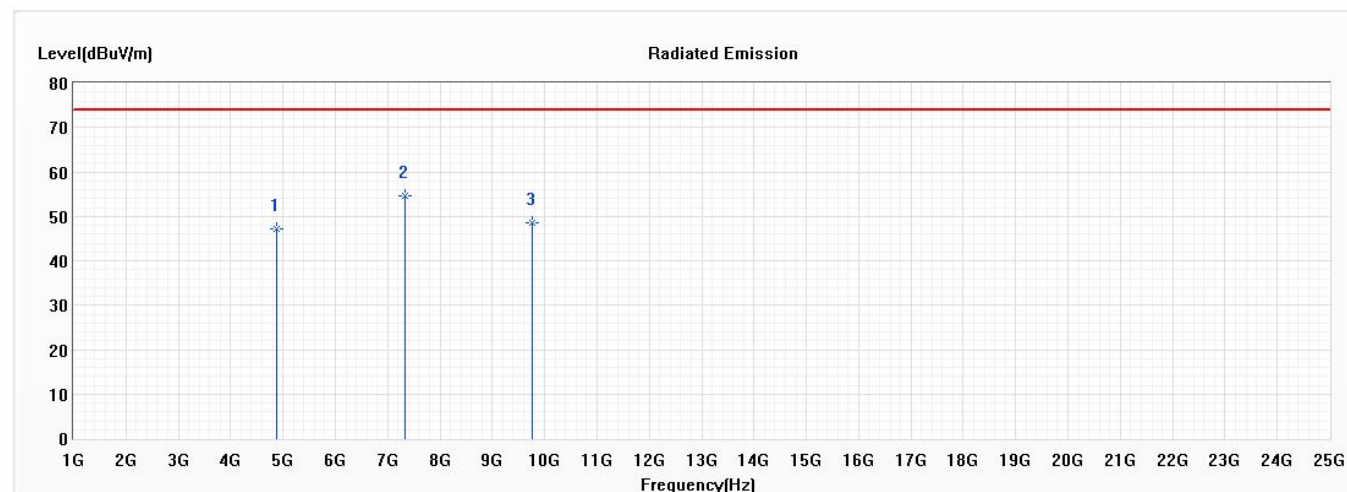
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2441MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	47.16	74.00	-26.84	51.49	-4.33	PK
* 2	7323.000	54.50	74.00	-19.50	55.20	-0.70	PK
3	9764.000	48.52	74.00	-25.48	46.50	2.02	PK

Note:

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

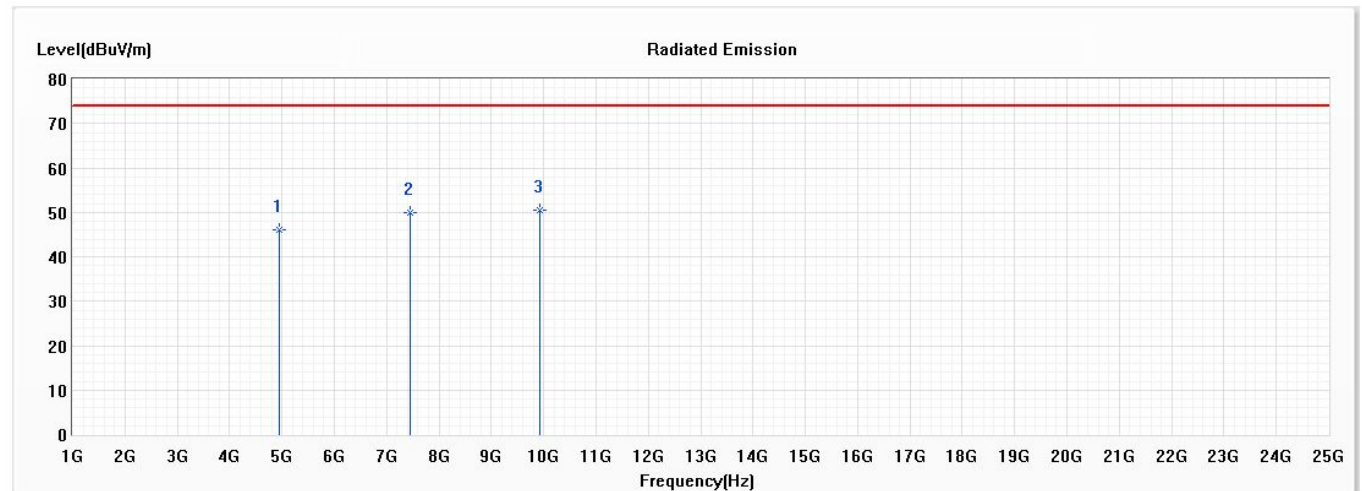
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
7323.000	54.50	-30.752	23.748	-30.252	74.000	54.000

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2480MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	46.06	74.00	-27.94	50.13	-4.07	PK
2	7440.000	49.97	74.00	-24.03	50.66	-0.69	PK
* 3	9920.000	50.39	74.00	-23.61	48.13	2.26	PK

Note:

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

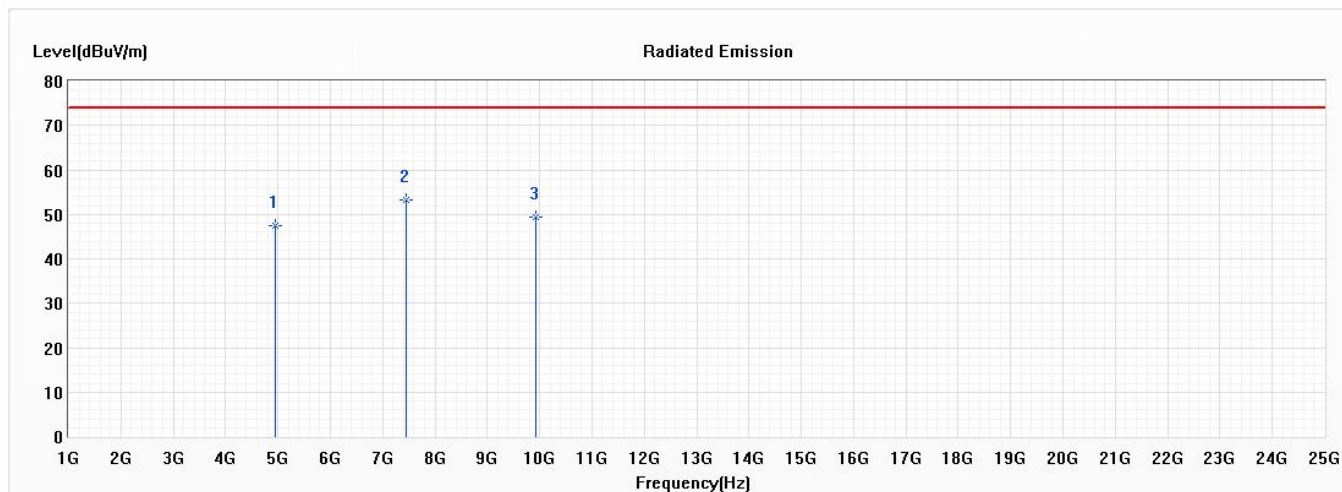
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps(2480MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	47.48	74.00	-26.52	51.55	-4.07	PK
* 2	7440.000	53.23	74.00	-20.77	53.92	-0.69	PK
3	9920.000	49.26	74.00	-24.74	47.00	2.26	PK

Note:

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

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
---	---	---	---	---	74.000	54.000

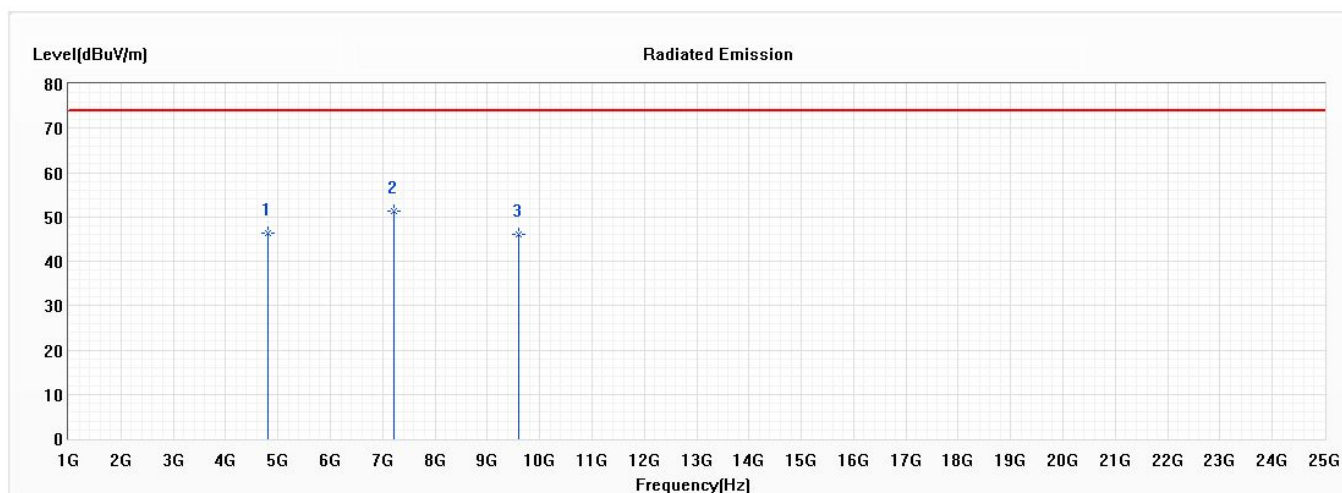
Average Detector:

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps(2402MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	46.32	74.00	-27.68	50.59	-4.27	PK
* 2	7206.000	51.18	74.00	-22.82	51.86	-0.68	PK
3	9608.000	46.14	74.00	-27.86	44.19	1.95	PK

Note:

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

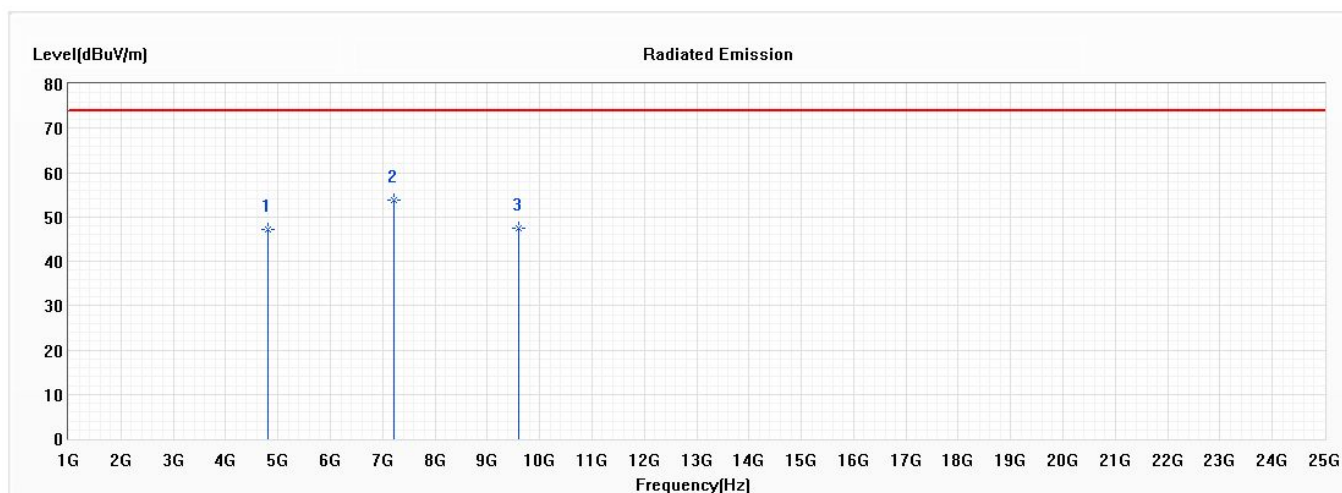
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps(2402MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	47.12	74.00	-26.88	51.39	-4.27	PK
* 2	7206.000	53.79	74.00	-20.21	54.47	-0.68	PK
3	9608.000	47.38	74.00	-26.62	45.43	1.95	PK

Note:

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

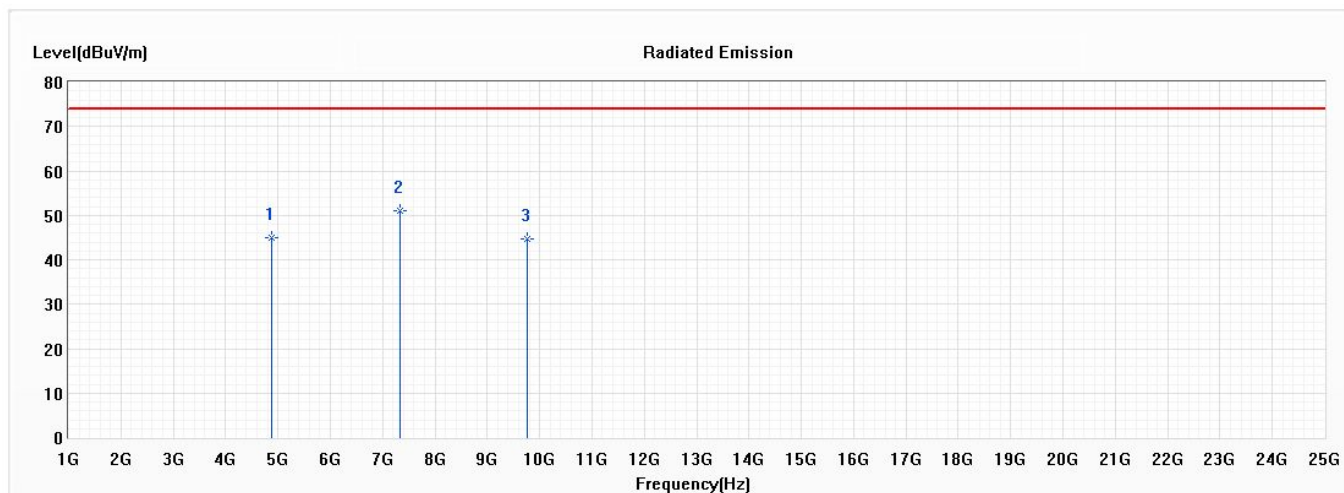
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	44.88	74.00	-29.12	49.21	-4.33	PK
* 2	7323.000	50.97	74.00	-23.03	51.67	-0.70	PK
3	9764.000	44.71	74.00	-29.29	42.69	2.02	PK

Note:

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

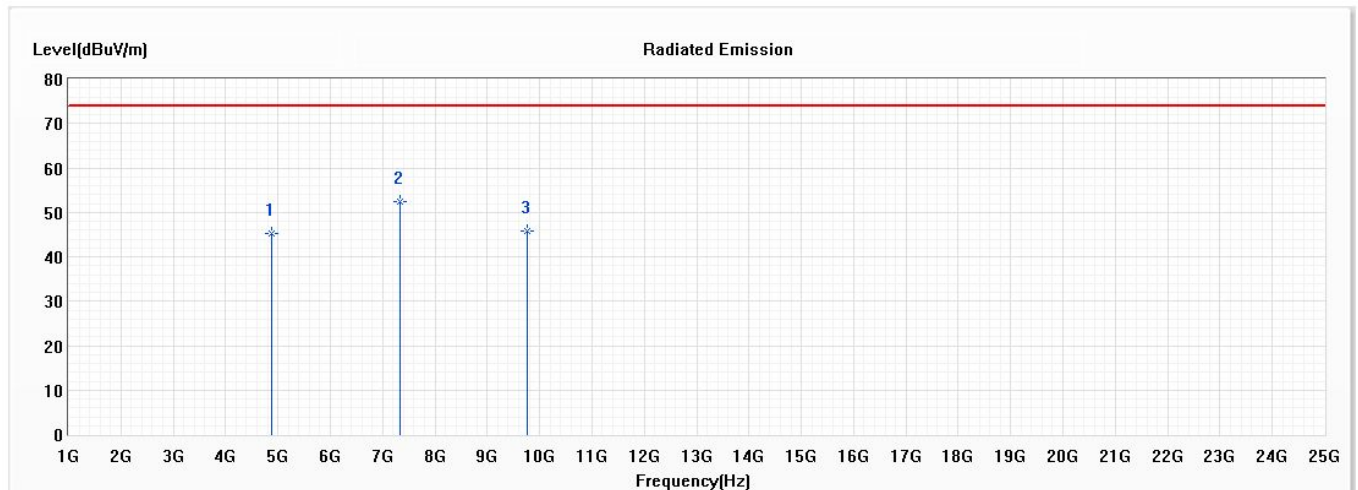
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4882.000	45.23	74.00	-28.77	49.56	-4.33	PK
* 2	7323.000	52.29	74.00	-21.71	52.99	-0.70	PK
3	9764.000	45.75	74.00	-28.25	43.73	2.02	PK

Note:

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

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
--	--	--	--	--	74.000	54.000

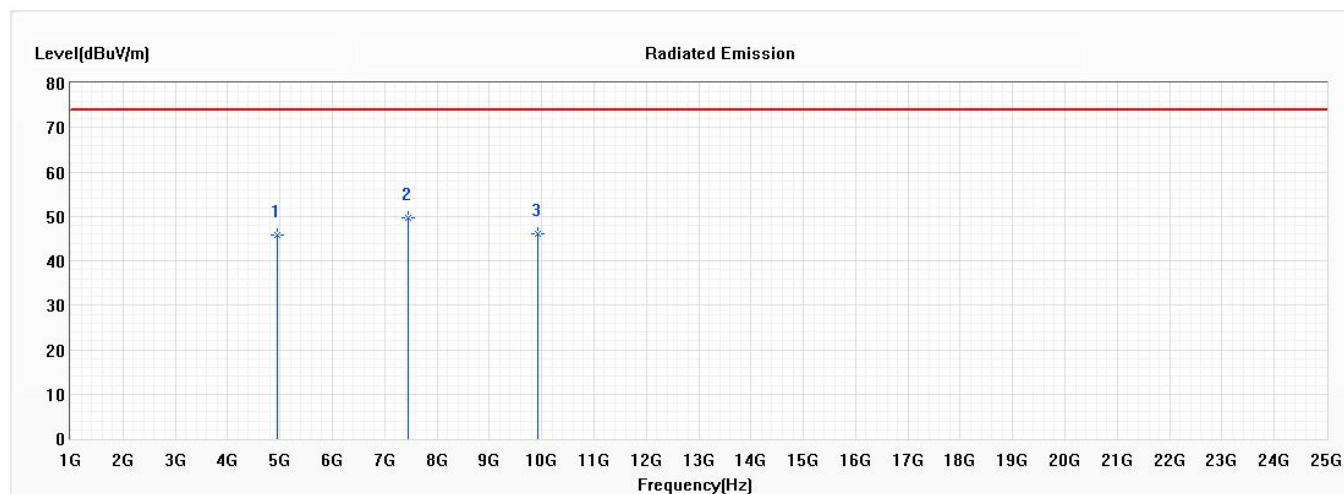
Average Detector:

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2020/11/03

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	45.83	74.00	-28.17	49.90	-4.07	PK
* 2	7440.000	49.58	74.00	-24.42	50.27	-0.69	PK
3	9920.000	45.94	74.00	-28.06	43.68	2.26	PK

Note:

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

Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
--	--	--	--	--	74.000	54.000

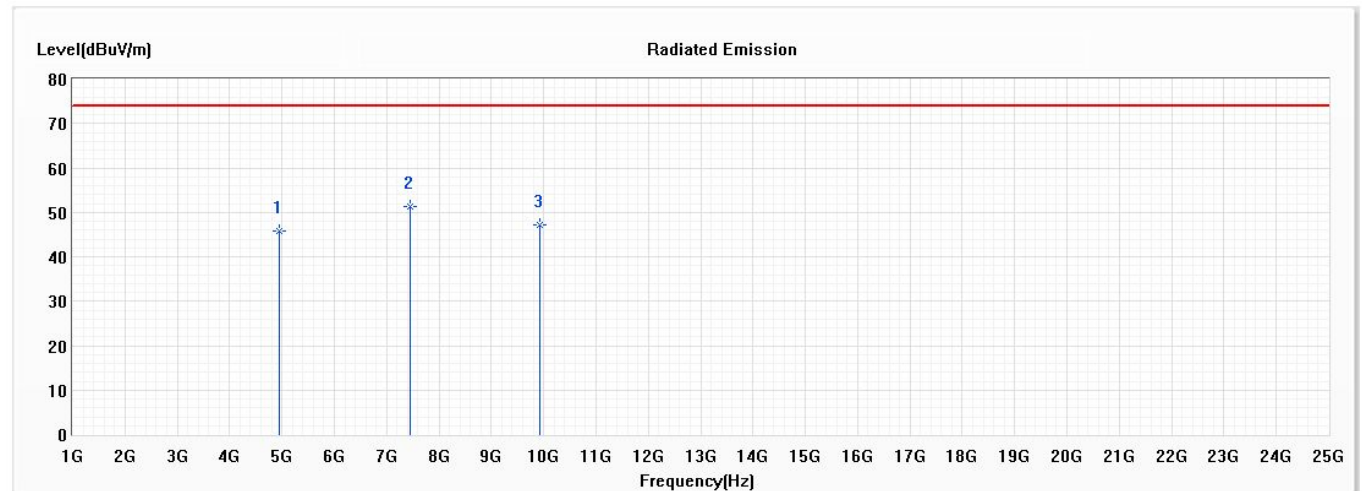
Average Detector:

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2020/11/03

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	45.92	74.00	-28.08	49.99	-4.07	PK
* 2	7440.000	51.18	74.00	-22.82	51.87	-0.69	PK
3	9920.000	47.11	74.00	-26.89	44.85	2.26	PK

Note:

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

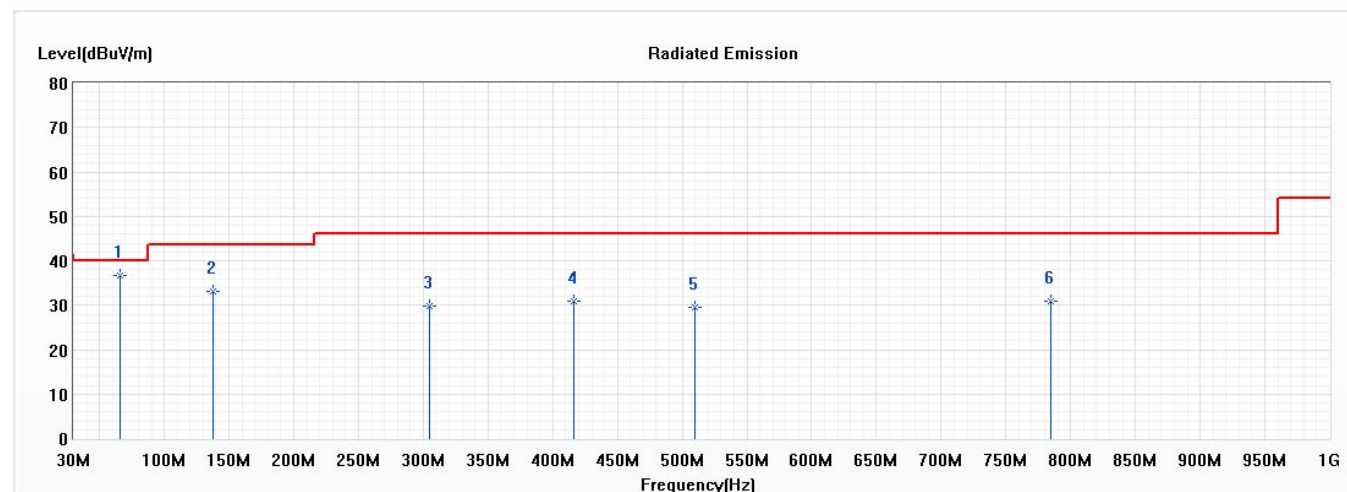
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
Average Detector:						
--	--	--	--	--	74.000	54.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2020/11/02

Horizontal



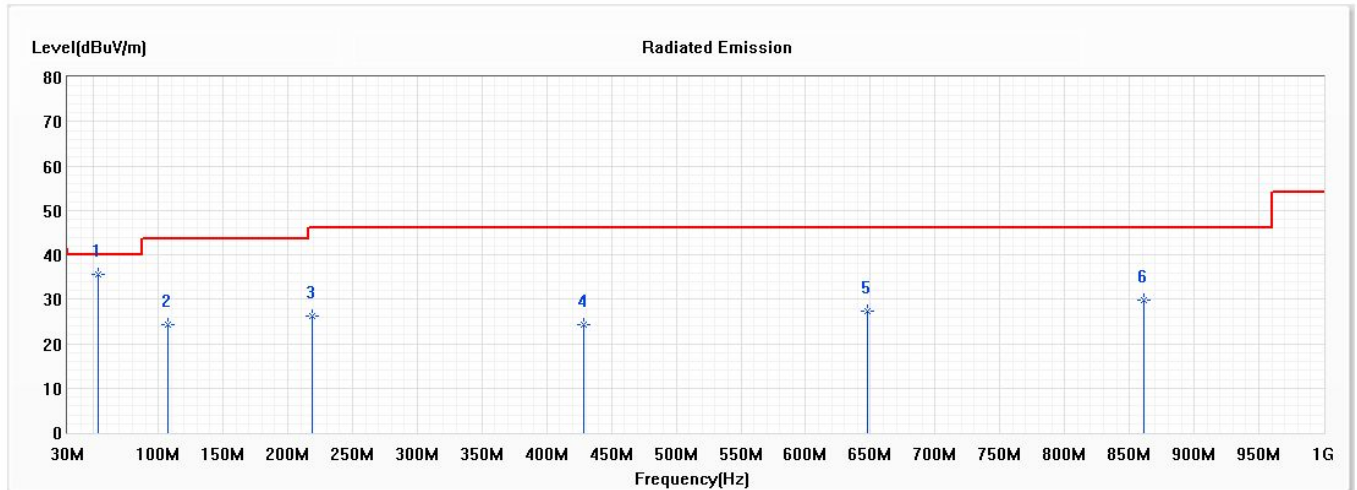
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	65.890	36.74	40.00	-3.26	48.73	-11.99	QP
2	137.670	33.20	43.50	-10.30	44.20	-11.00	QP
3	304.510	29.74	46.00	-16.26	38.54	-8.80	QP
4	416.060	30.93	46.00	-15.07	37.13	-6.20	QP
5	510.150	29.42	46.00	-16.58	33.62	-4.20	QP
6	784.660	30.91	46.00	-15.09	30.32	0.59	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 1: Transmit - 1Mbps (2441MHz)
 Test Date : 2020/11/02

Vertical



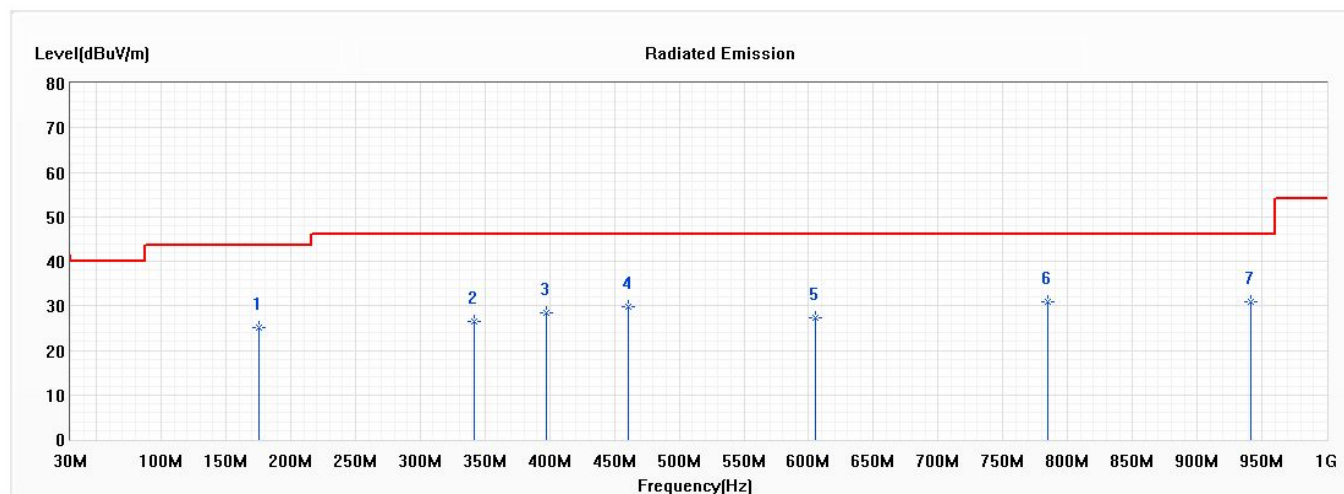
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	53.280	35.65	40.00	-4.35	45.78	-10.13	QP
2	107.600	24.32	43.50	-19.18	38.28	-13.96	QP
3	219.150	26.16	46.00	-19.84	38.15	-11.99	QP
4	428.670	24.40	46.00	-21.60	30.25	-5.85	QP
5	647.890	27.31	46.00	-18.69	29.09	-1.78	QP
6	861.290	29.76	46.00	-16.24	28.48	1.28	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
 Test Date : 2020/11/02

Horizontal



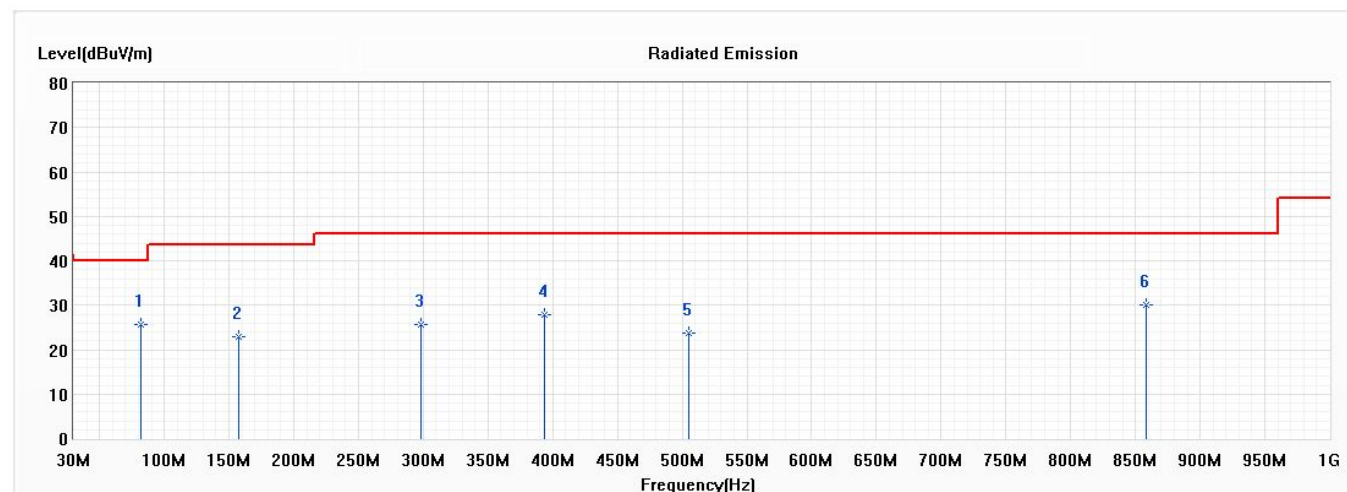
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	175.500	25.24	43.50	-18.26	36.12	-10.88	QP
2	341.370	26.51	46.00	-19.49	34.32	-7.81	QP
3	397.630	28.40	46.00	-17.60	34.92	-6.52	QP
4	460.680	29.76	46.00	-16.24	34.78	-5.02	QP
5	605.210	27.36	46.00	-18.64	29.45	-2.09	QP
* 6	784.660	30.91	46.00	-15.09	30.32	0.59	QP
7	941.800	30.86	46.00	-15.14	28.48	2.38	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 2: Transmit - 2Mbps (2441MHz)
 Test Date : 2020/11/02

Vertical



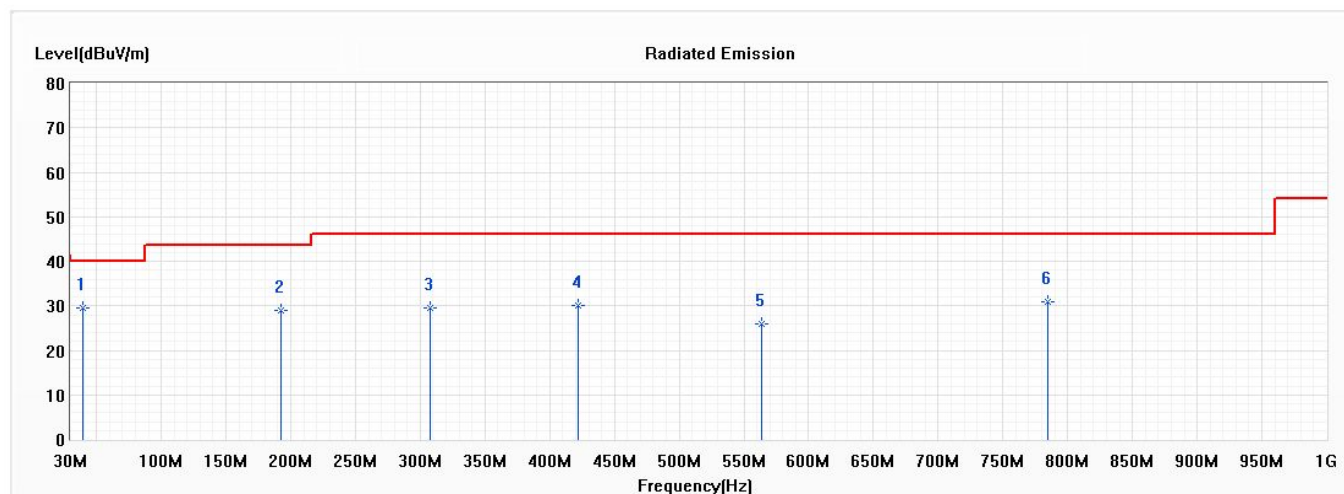
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	82.380	25.76	40.00	-14.24	41.12	-15.36	QP
2	157.070	22.83	43.50	-20.67	33.04	-10.21	QP
3	298.690	25.78	46.00	-20.22	34.83	-9.05	QP
4	393.750	27.75	46.00	-18.25	34.30	-6.55	QP
5	505.300	23.64	46.00	-22.36	27.96	-4.32	QP
6	858.380	30.06	46.00	-15.94	28.70	1.36	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/02

Horizontal



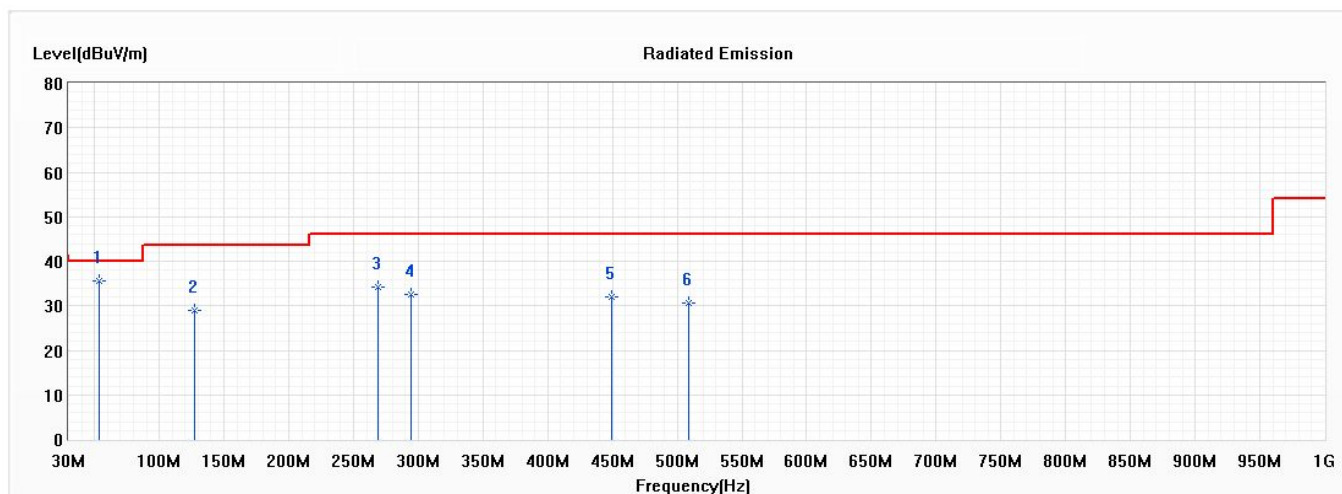
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	39.700	29.58	40.00	-10.42	40.42	-10.84	QP
2	191.990	28.86	43.50	-14.64	40.90	-12.04	QP
3	307.420	29.54	46.00	-16.46	38.26	-8.72	QP
4	421.880	30.18	46.00	-15.82	36.22	-6.04	QP
5	563.500	25.92	46.00	-20.08	29.11	-3.19	QP
6	784.660	30.91	46.00	-15.09	30.32	0.59	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 3: Transmit - 3Mbps (2441MHz)
 Test Date : 2020/11/02

Vertical



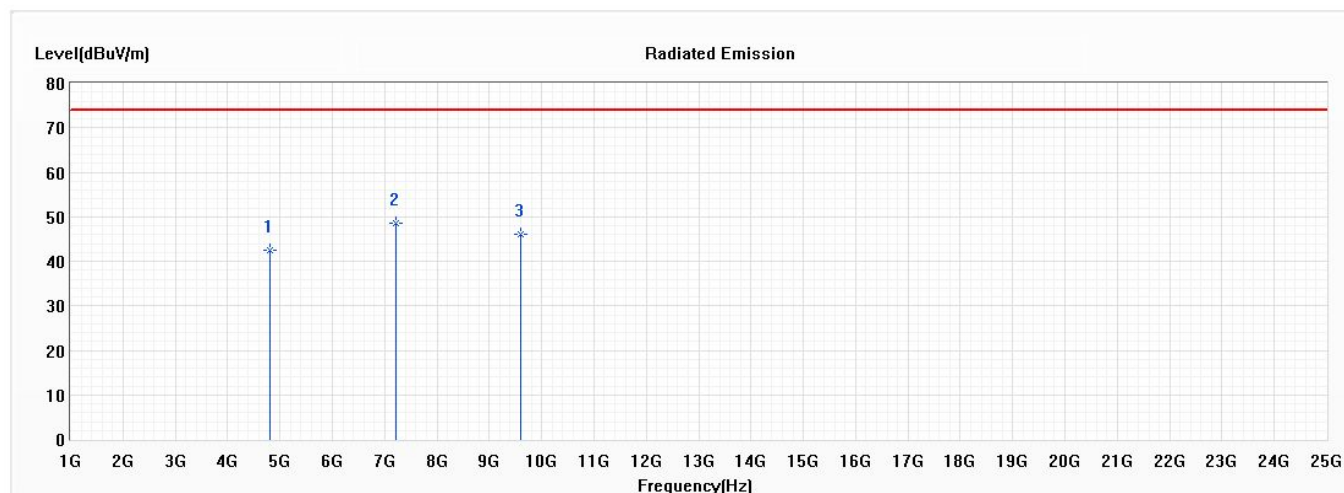
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	53.280	35.65	40.00	-4.35	45.78	-10.13	QP
2	127.000	29.10	43.50	-14.40	41.55	-12.45	QP
3	268.620	34.11	46.00	-11.89	44.03	-9.92	QP
4	294.810	32.43	46.00	-13.57	41.65	-9.22	QP
5	449.040	31.97	46.00	-14.03	37.26	-5.29	QP
6	509.180	30.53	46.00	-15.47	34.76	-4.23	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE(2402MHz)
 Test Date : 2020/11/03

Horizontal



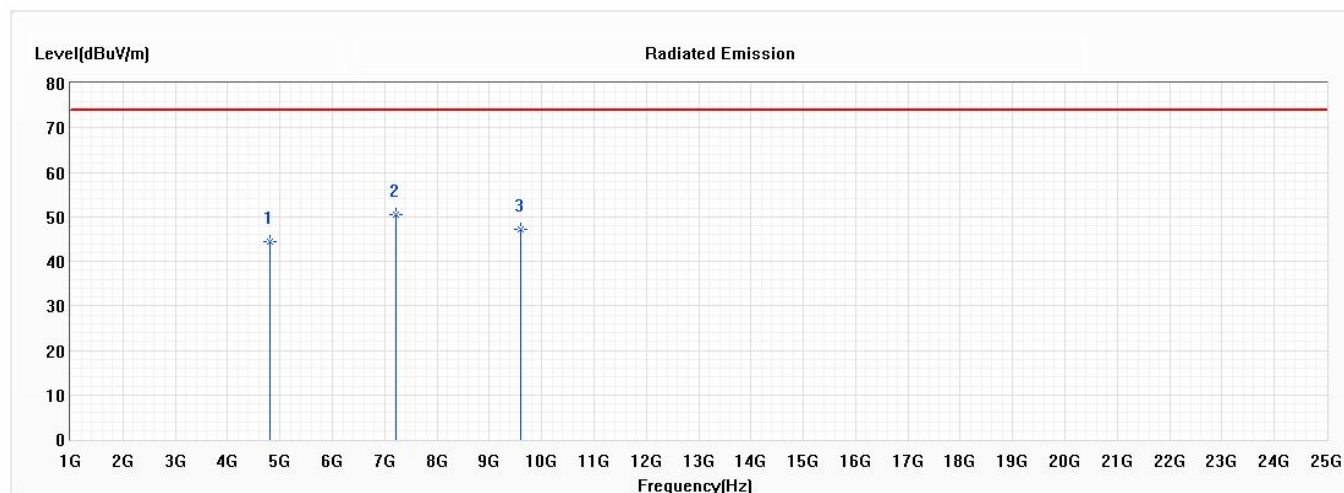
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	42.58	74.00	-31.42	46.85	-4.27	PK
* 2	7206.000	48.57	74.00	-25.43	49.25	-0.68	PK
3	9608.000	46.19	74.00	-27.81	44.24	1.95	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE(2402MHz)
 Test Date : 2020/11/03

Vertical



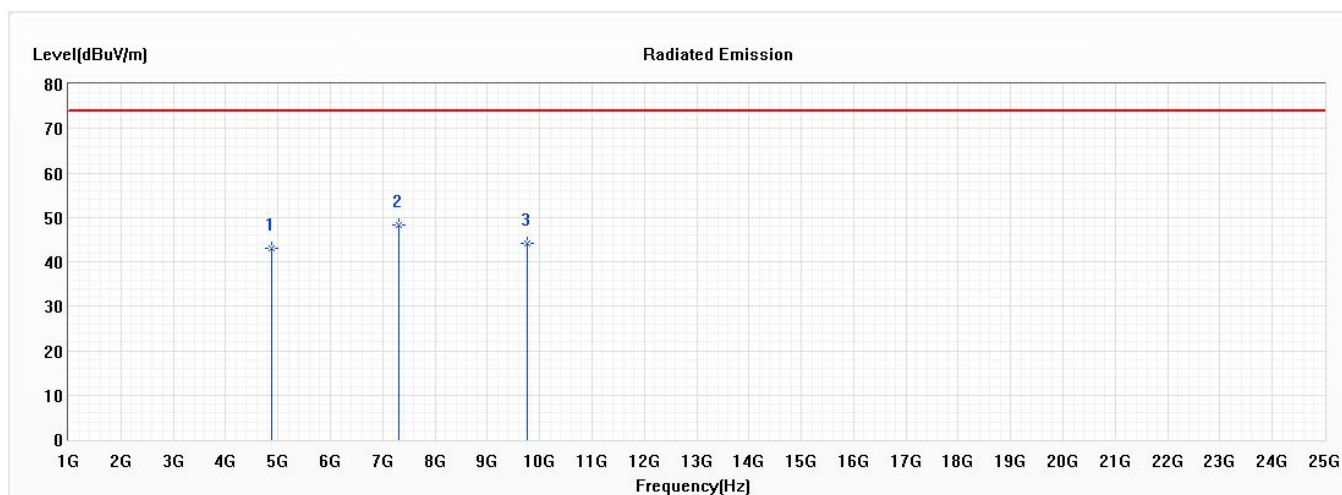
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	44.29	74.00	-29.71	48.56	-4.27	PK
* 2	7206.000	50.52	74.00	-23.48	51.20	-0.68	PK
3	9608.000	47.30	74.00	-26.70	45.35	1.95	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2440MHz)
 Test Date : 2020/11/03

Horizontal



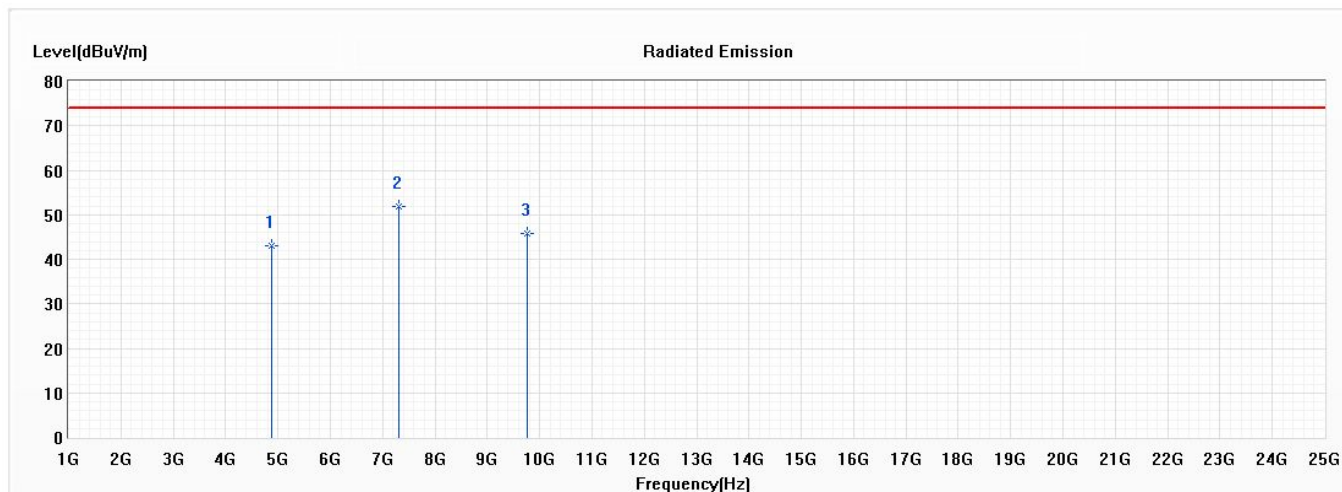
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	43.00	74.00	-31.00	47.32	-4.32	PK
* 2	7320.000	48.29	74.00	-25.71	48.99	-0.70	PK
3	9760.000	44.22	74.00	-29.78	42.24	1.98	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2440MHz)
 Test Date : 2020/11/03

Vertical



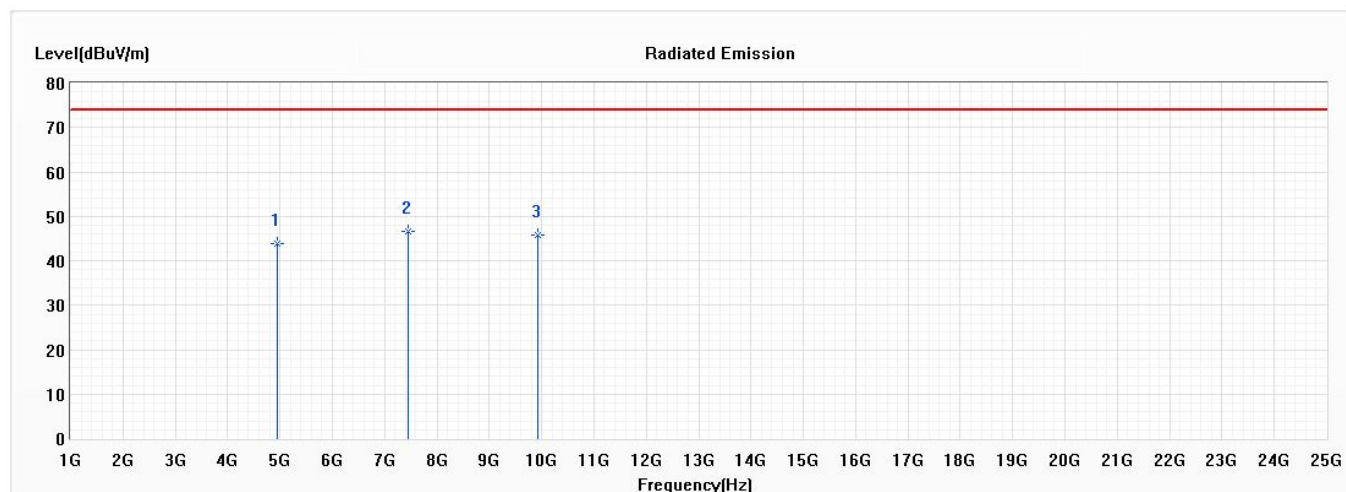
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	43.08	74.00	-30.92	47.40	-4.32	PK
* 2	7320.000	51.89	74.00	-22.11	52.59	-0.70	PK
3	9760.000	45.82	74.00	-28.18	43.84	1.98	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2480MHz)
 Test Date : 2020/11/03

Horizontal



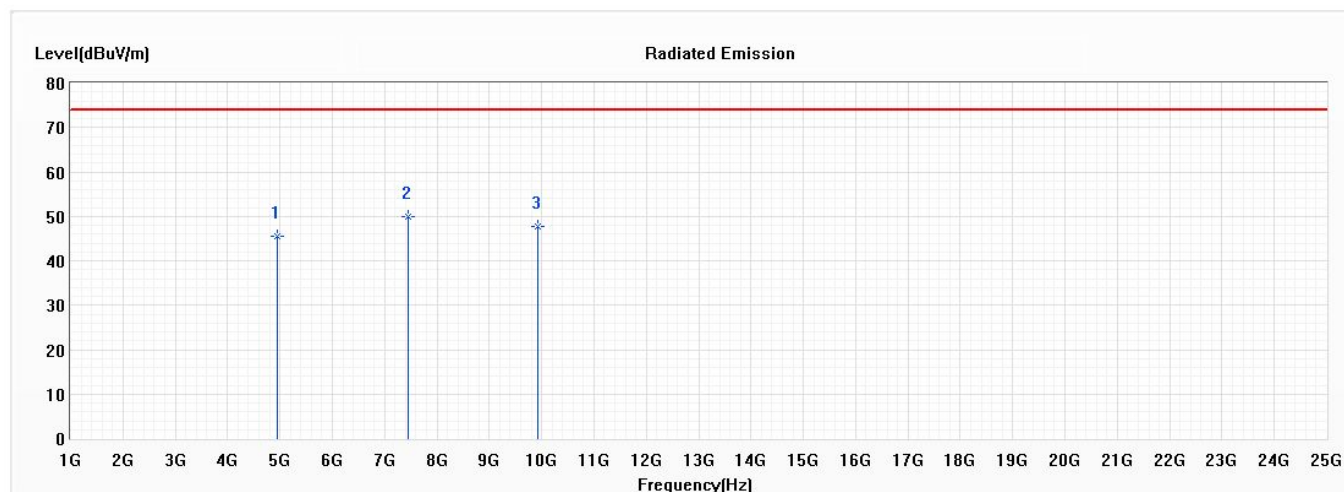
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	43.74	74.00	-30.26	47.81	-4.07	PK
* 2	7440.000	46.56	74.00	-27.44	47.25	-0.69	PK
3	9920.000	45.81	74.00	-28.19	43.55	2.26	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2480MHz)
 Test Date : 2020/11/03

Vertical



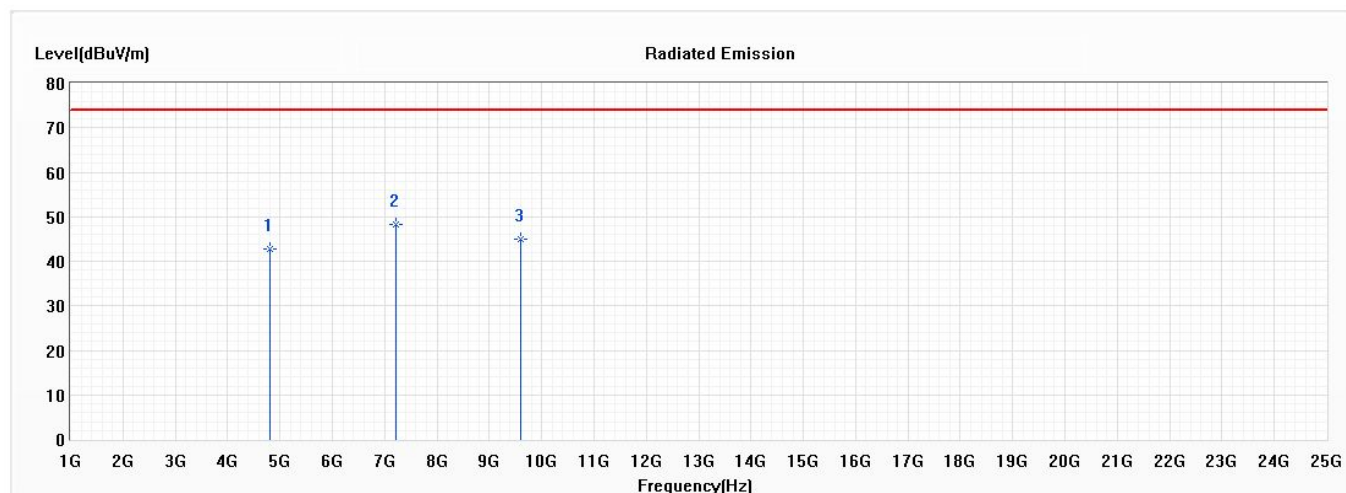
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	45.38	74.00	-28.62	49.45	-4.07	PK
* 2	7440.000	49.94	74.00	-24.06	50.63	-0.69	PK
3	9920.000	47.80	74.00	-26.20	45.54	2.26	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2402MHz)
 Test Date : 2020/11/03

Horizontal



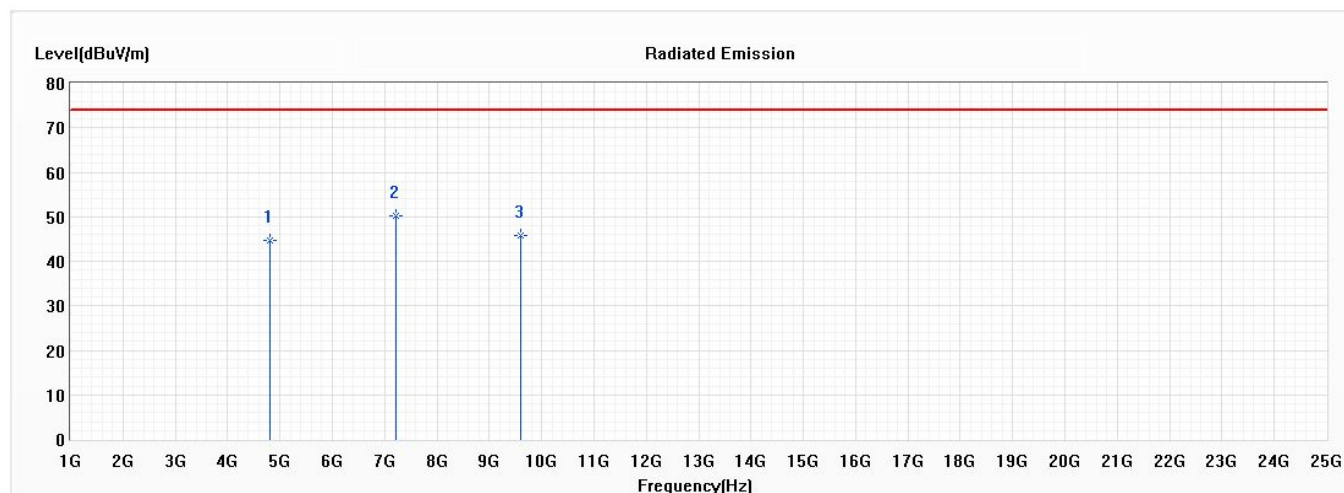
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	42.68	74.00	-31.32	46.95	-4.27	PK
* 2	7206.000	48.34	74.00	-25.66	49.02	-0.68	PK
3	9608.000	44.91	74.00	-29.09	42.96	1.95	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2402MHz)
 Test Date : 2020/11/03

Vertical



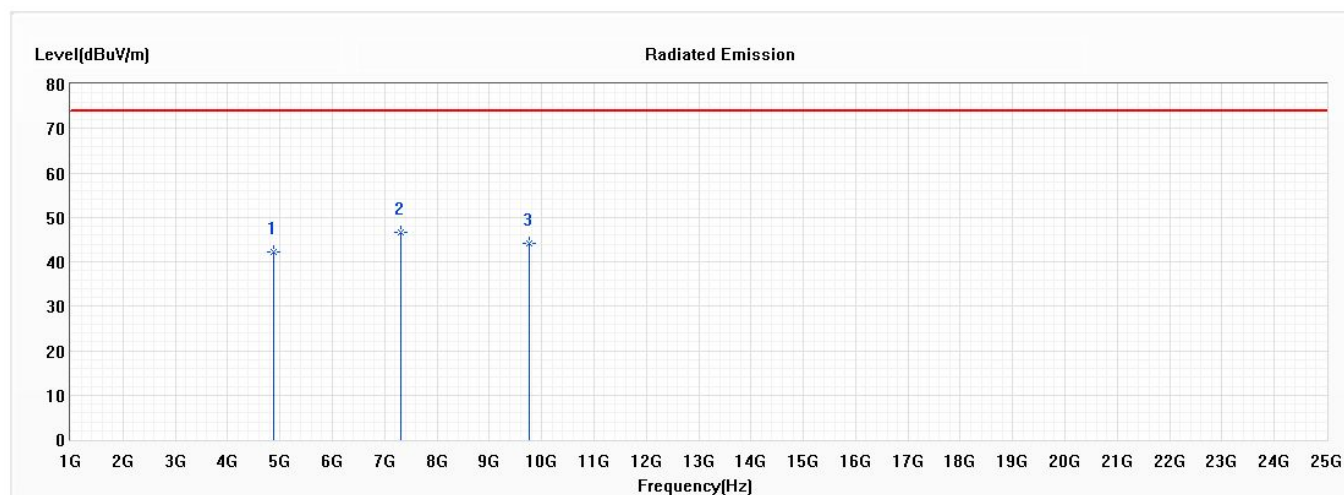
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4804.000	44.69	74.00	-29.31	48.96	-4.27	PK
* 2	7206.000	50.32	74.00	-23.68	51.00	-0.68	PK
3	9608.000	45.72	74.00	-28.28	43.77	1.95	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/03

Horizontal



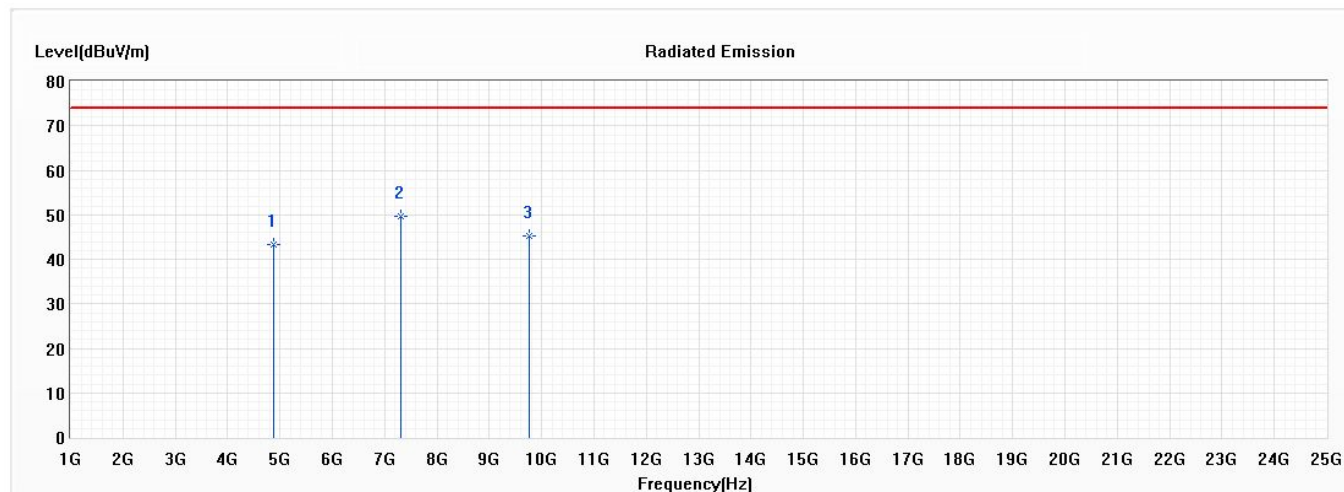
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	42.16	74.00	-31.84	46.48	-4.32	PK
* 2	7320.000	46.72	74.00	-27.28	47.42	-0.70	PK
3	9760.000	44.20	74.00	-29.80	42.22	1.98	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/03

Vertical



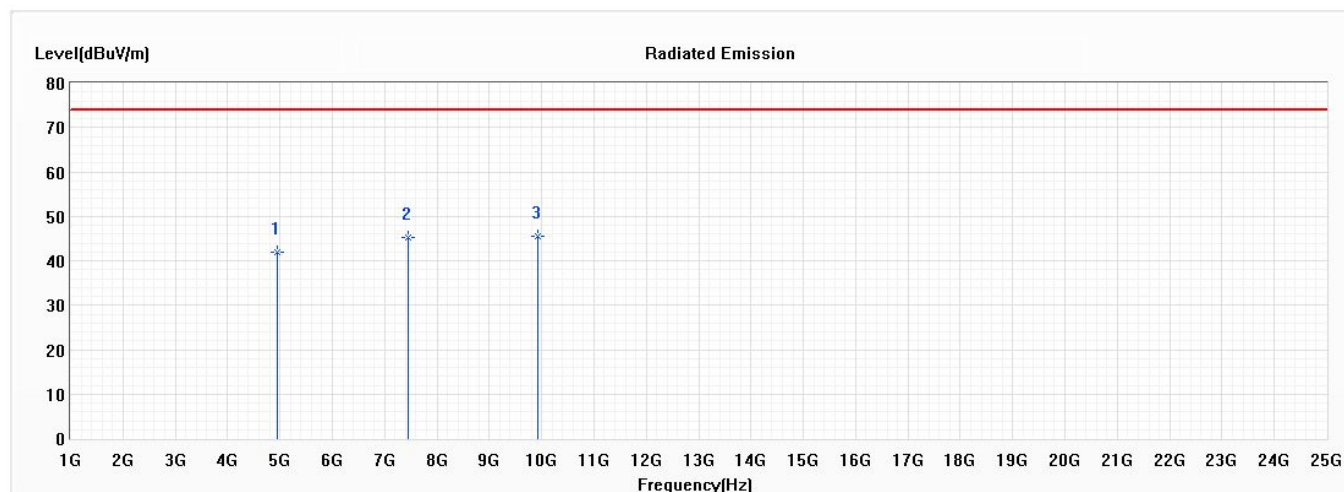
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4880.000	43.44	74.00	-30.56	47.76	-4.32	PK
* 2	7320.000	49.66	74.00	-24.34	50.36	-0.70	PK
3	9760.000	45.18	74.00	-28.82	43.20	1.98	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2480MHz)
 Test Date : 2020/11/03

Horizontal



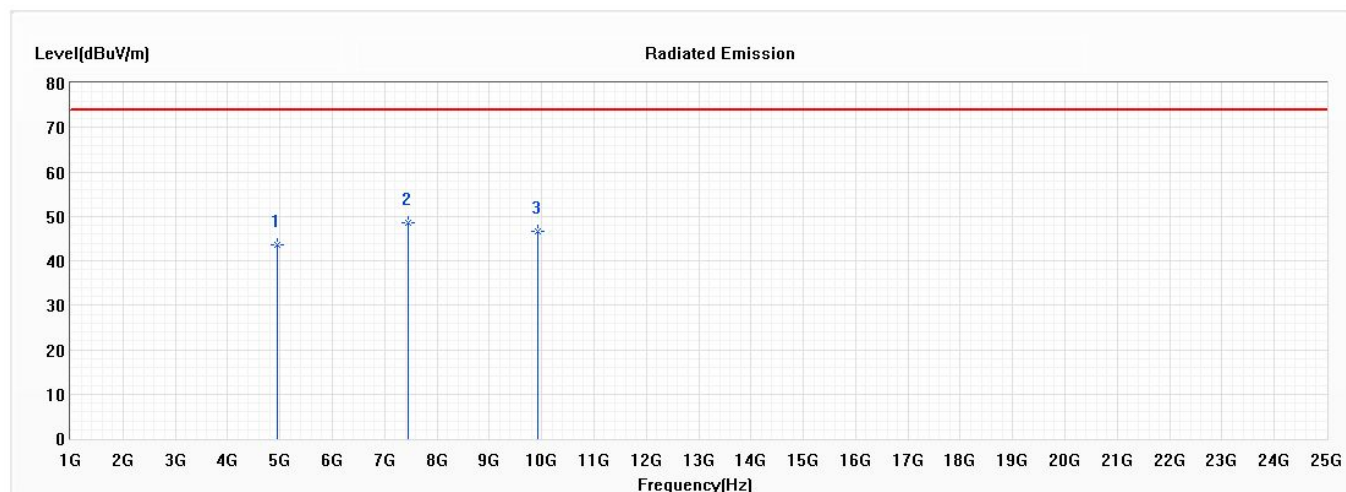
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	42.03	74.00	-31.97	46.10	-4.07	PK
2	7440.000	45.15	74.00	-28.85	45.84	-0.69	PK
* 3	9920.000	45.57	74.00	-28.43	43.31	2.26	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : Harmonic Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2480MHz)
 Test Date : 2020/11/03

Vertical



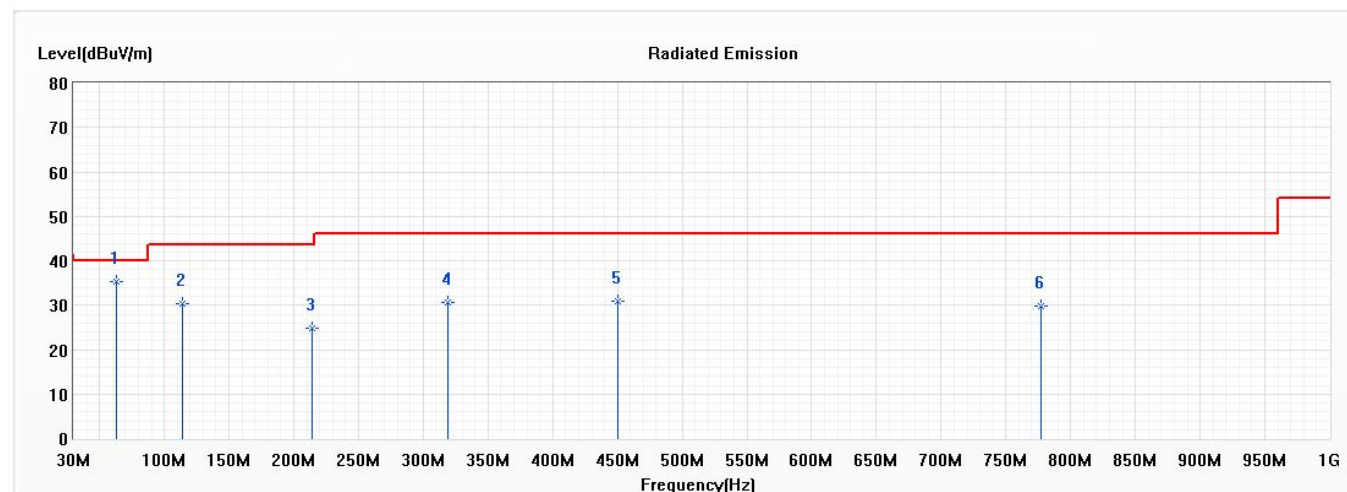
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4960.000	43.66	74.00	-30.34	47.73	-4.07	PK
* 2	7440.000	48.44	74.00	-25.56	49.13	-0.69	PK
3	9920.000	46.57	74.00	-27.43	44.31	2.26	PK

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2440MHz)
 Test Date : 2020/11/02

Horizontal



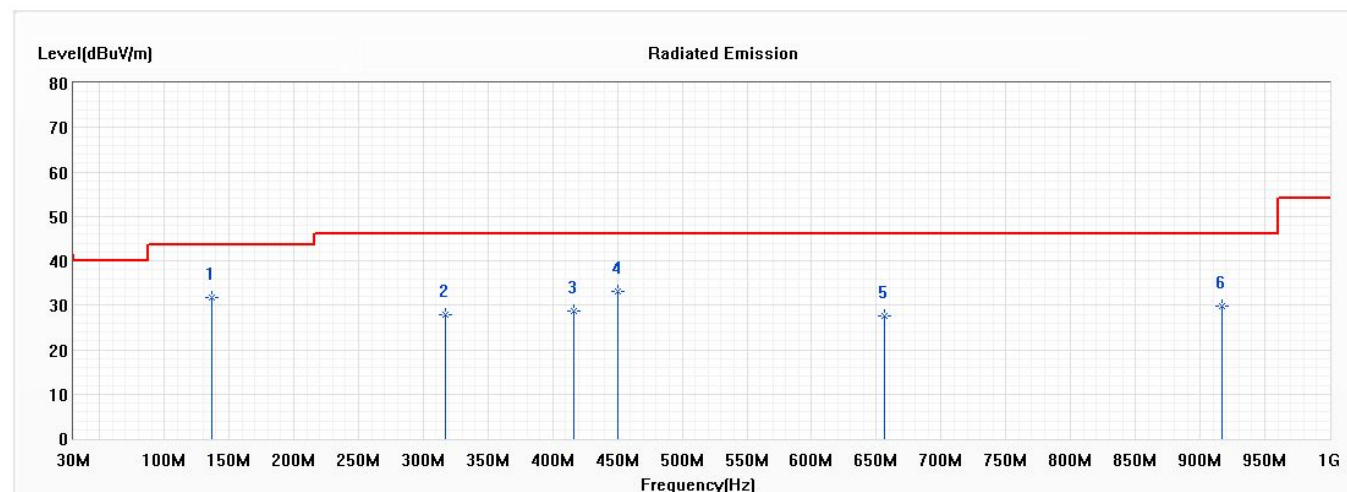
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	62.980	35.26	40.00	-4.74	46.72	-11.46	QP
2	114.390	30.44	43.50	-13.06	43.90	-13.46	QP
3	214.300	24.72	43.50	-18.78	36.83	-12.11	QP
4	319.060	30.72	46.00	-15.28	39.06	-8.34	QP
5	450.010	30.99	46.00	-15.01	36.22	-5.23	QP
6	776.900	29.91	46.00	-16.09	29.51	0.40	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2440MHz)
 Test Date : 2020/11/02

Vertical



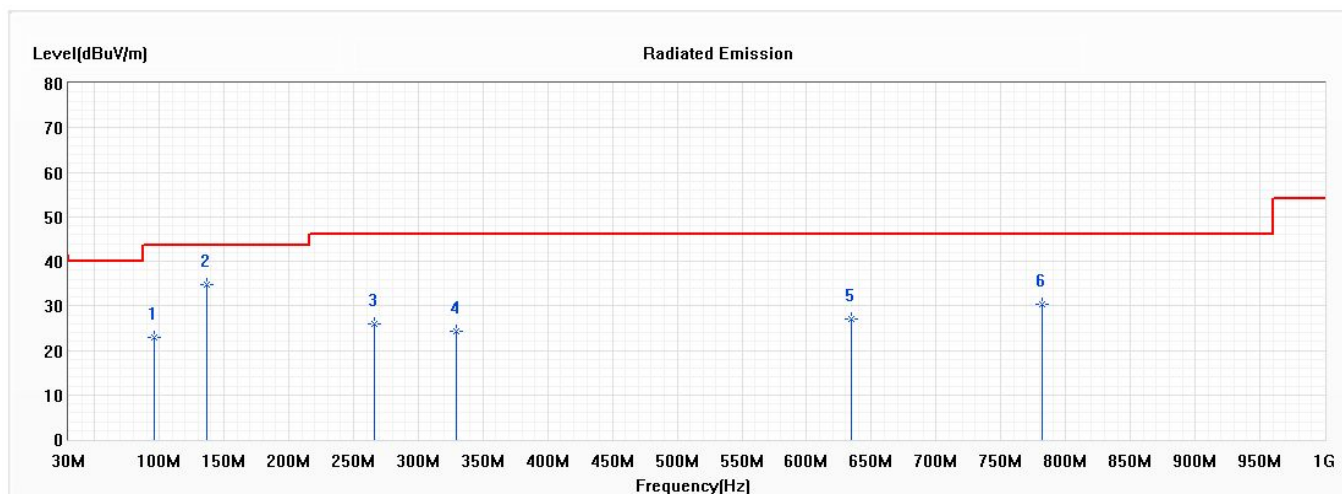
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	136.700	31.83	43.50	-11.67	42.94	-11.11	QP
2	317.120	27.75	46.00	-18.25	36.14	-8.39	QP
3	416.060	28.72	46.00	-17.28	34.92	-6.20	QP
4	450.010	33.07	46.00	-12.93	38.30	-5.23	QP
5	656.620	27.50	46.00	-18.50	29.16	-1.66	QP
6	916.580	29.75	46.00	-16.25	27.60	2.15	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/02

Horizontal



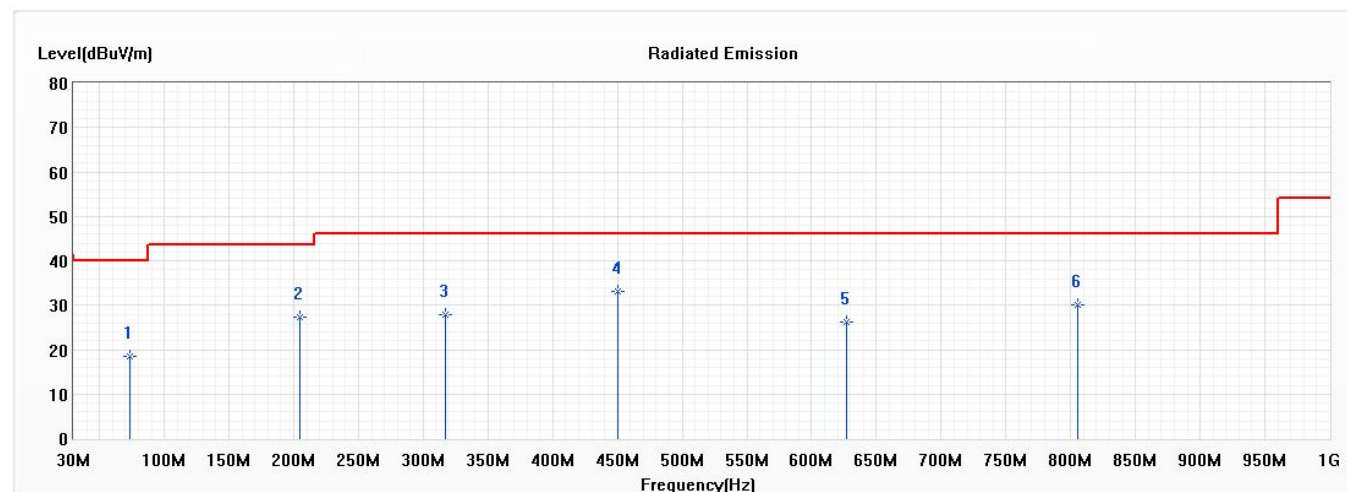
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	95.960	22.84	43.50	-20.66	38.77	-15.93	QP
* 2	136.700	34.79	43.50	-8.71	45.90	-11.11	QP
3	265.710	26.00	46.00	-20.00	36.11	-10.11	QP
4	329.730	24.30	46.00	-21.70	32.30	-8.00	QP
5	634.310	27.01	46.00	-18.99	28.87	-1.86	QP
6	781.750	30.31	46.00	-15.69	29.78	0.53	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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 : Gaming headset
 Test Item : General Radiated Emission
 Test Mode : Mode 5: Transmit - 2Mbps-BLE (2440MHz)
 Test Date : 2020/11/02

Vertical



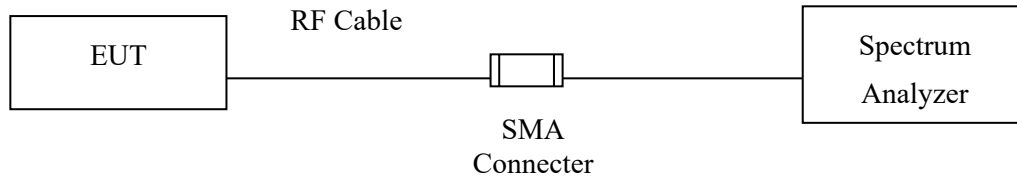
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	73.650	18.53	40.00	-21.47	32.09	-13.56	QP
2	204.600	27.41	43.50	-16.09	39.75	-12.34	QP
3	317.120	27.75	46.00	-18.25	36.14	-8.39	QP
* 4	450.010	33.07	46.00	-12.93	38.30	-5.23	QP
5	626.550	26.21	46.00	-19.79	28.22	-2.01	QP
6	805.030	30.04	46.00	-15.96	29.45	0.59	QP

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement 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



5.2. 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.

5.3. Test Procedure

Tested according to FHSS test procedure of KDB558074 section 9 b) for compliance to FCC 47CFR 15.247 requirements.

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 : Gaming headset
Test Item : RF Antenna Conducted Test
Test Mode : Mode 1: Transmit - 1Mbps
Test Date : 2020/10/28

Figure Channel 00:

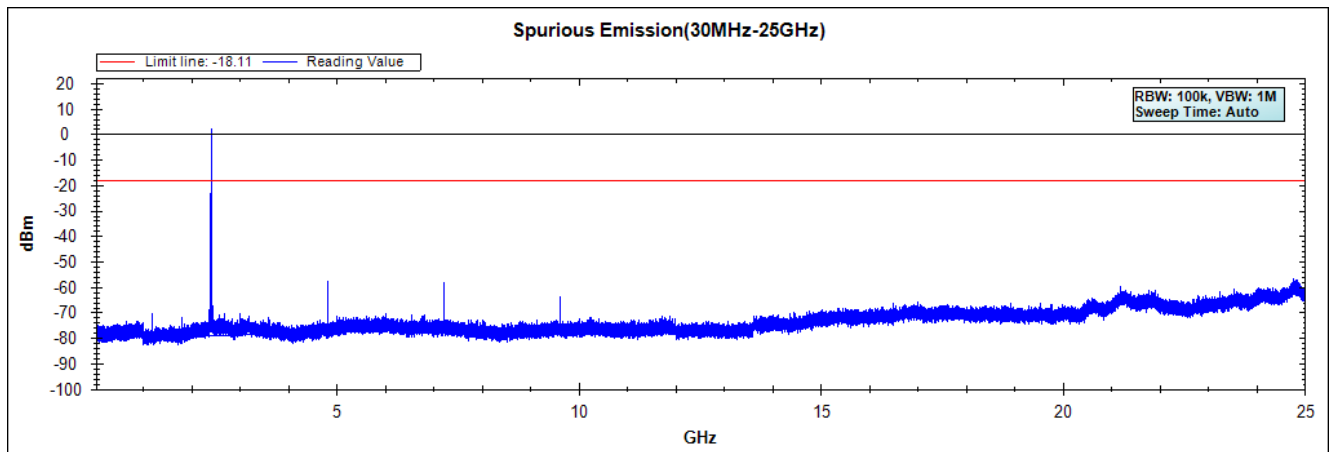


Figure Channel 39:

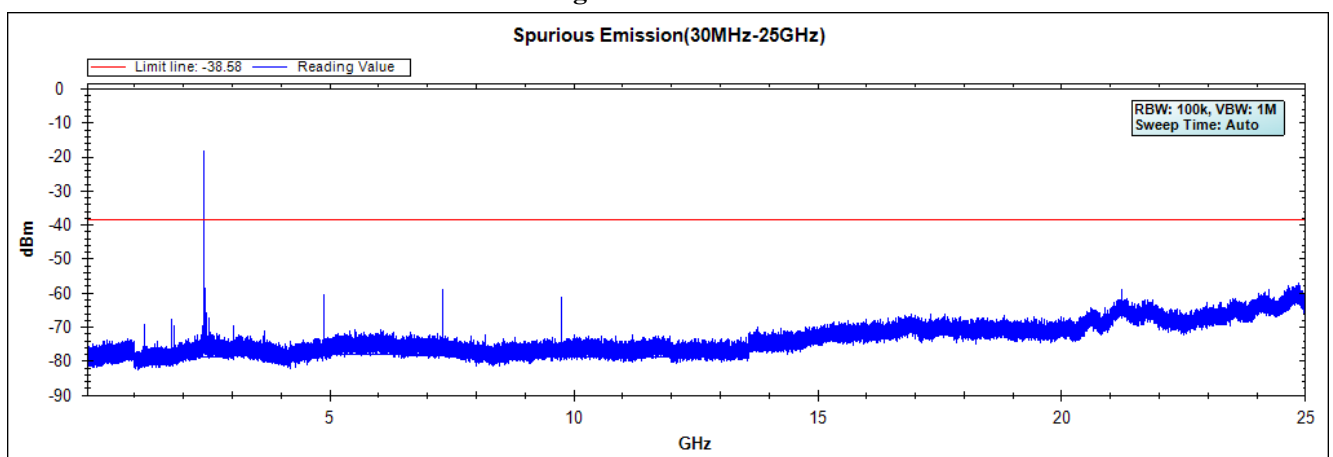
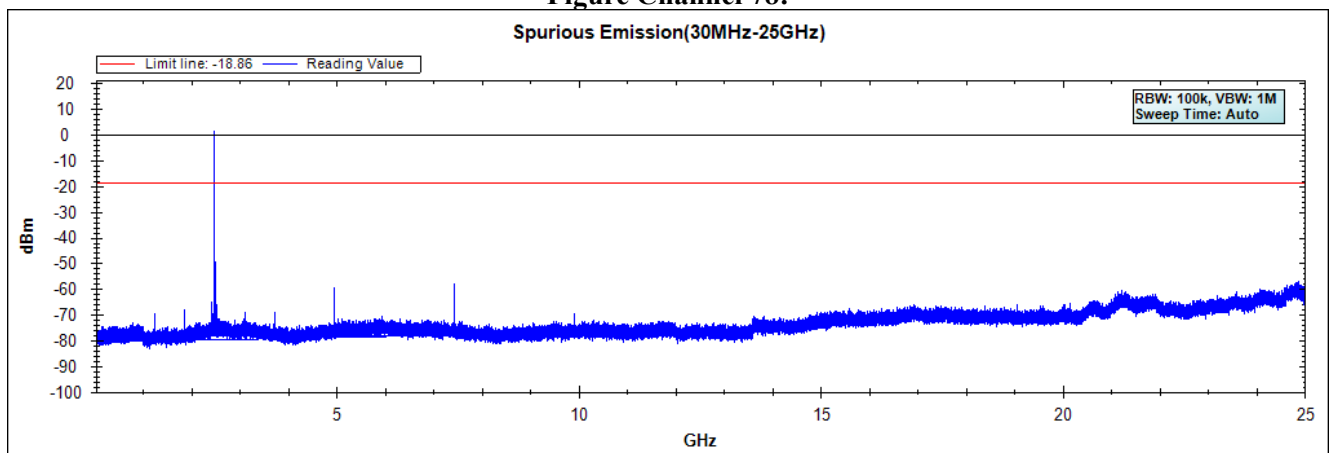
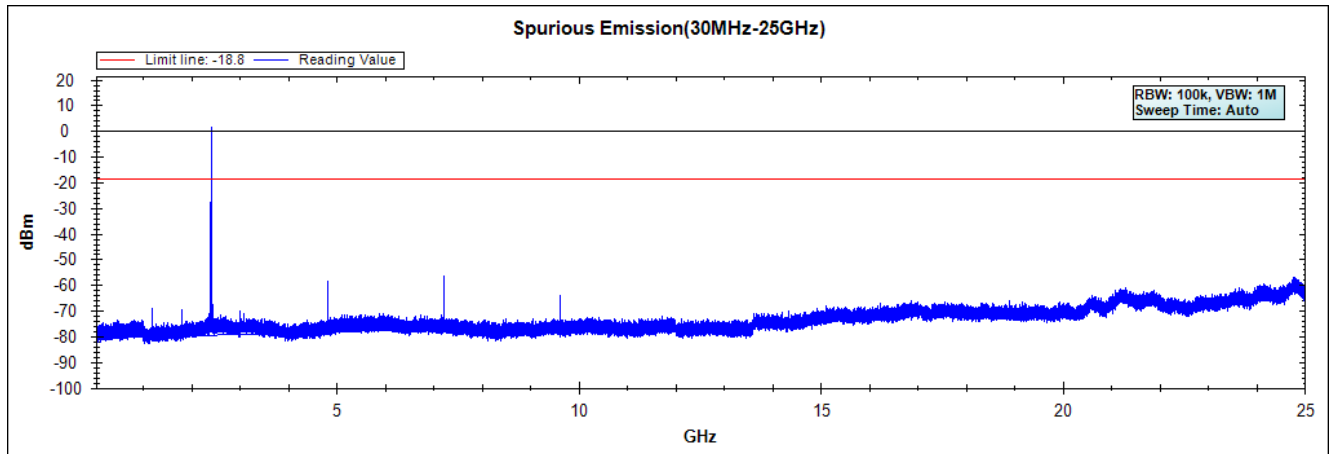
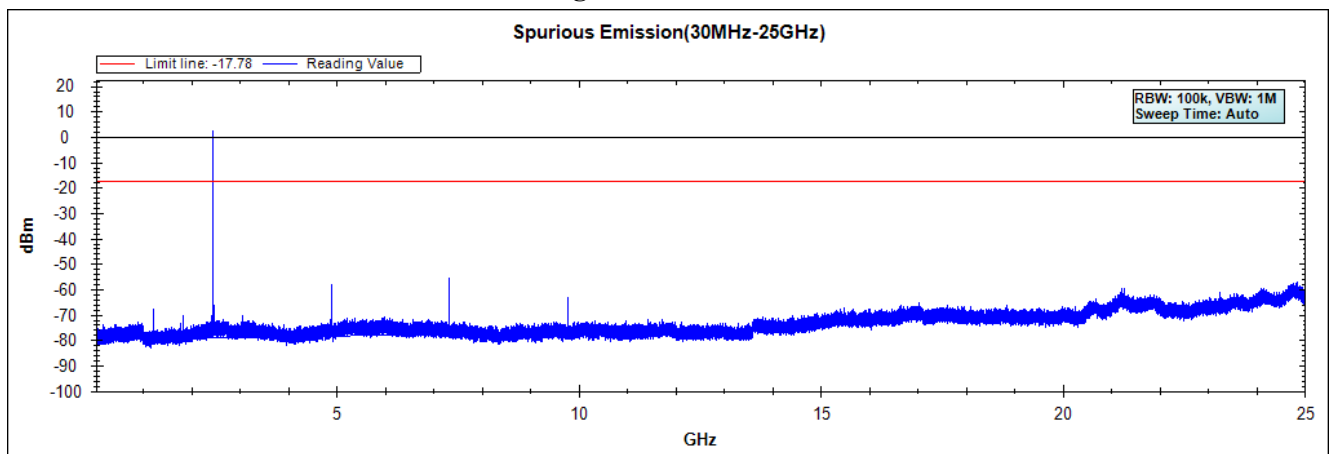
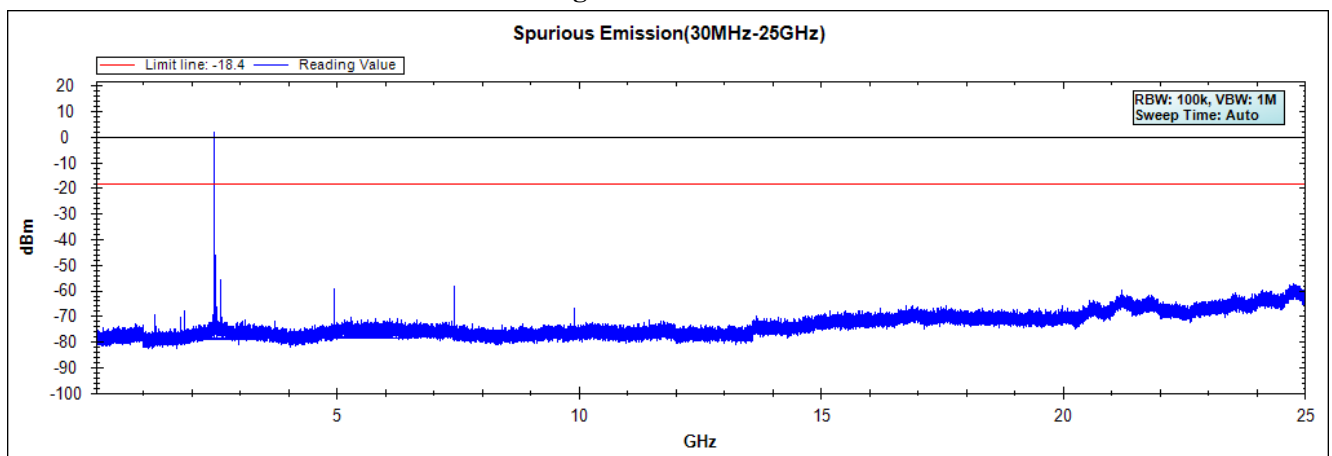


Figure Channel 78:



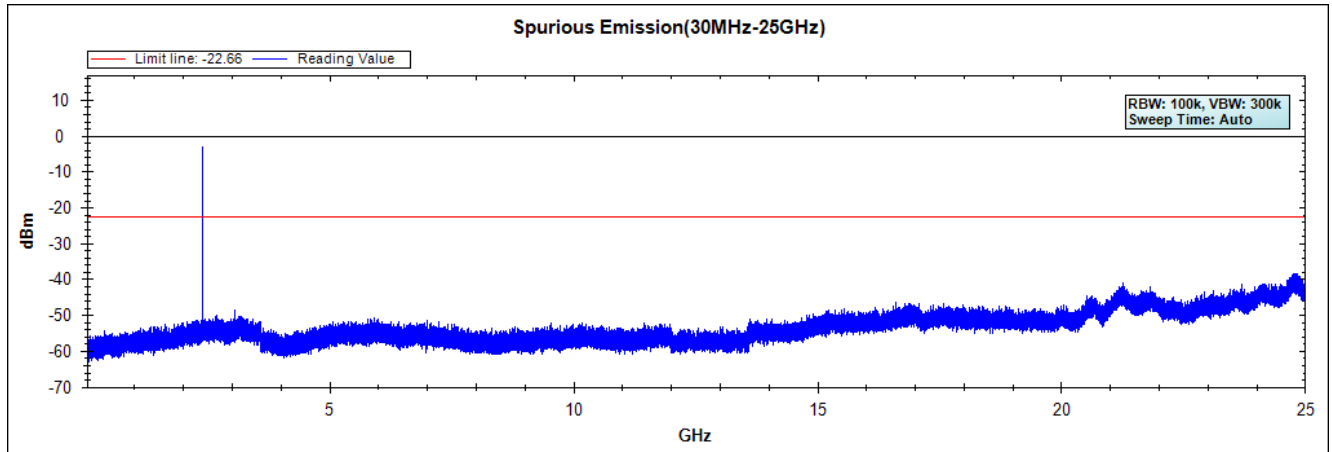
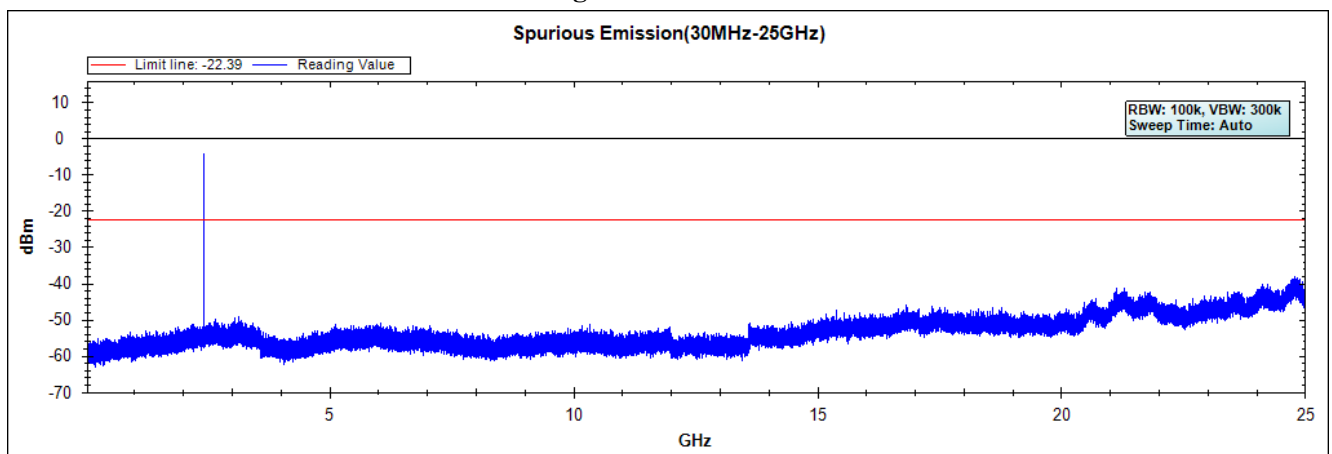
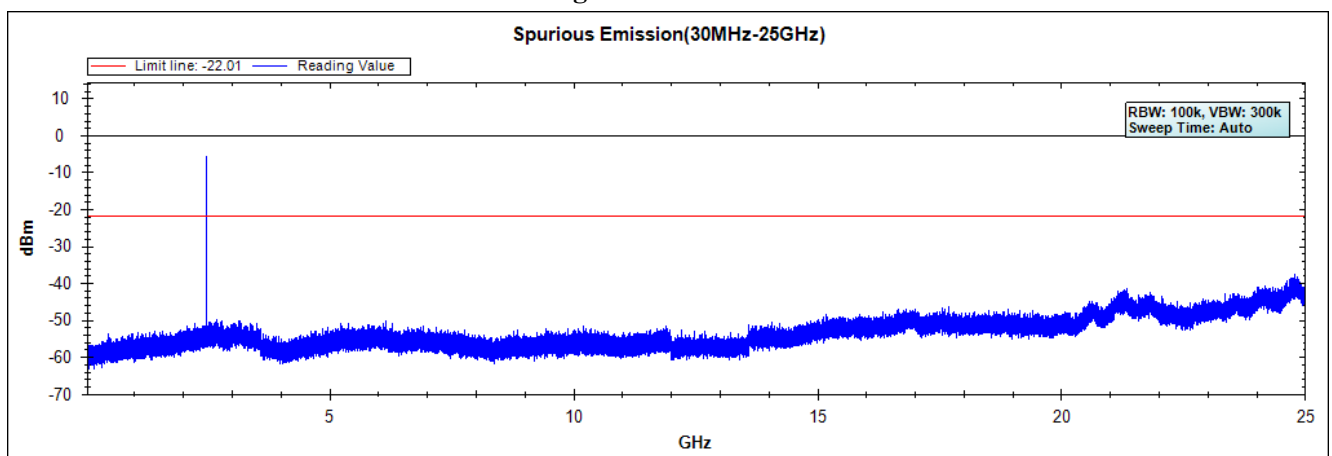
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Gaming headset
Test Item : RF Antenna Conducted Test
Test Mode : Mode 3: Transmit - 3Mbps
Test Date : 2020/10/28

Figure Channel 00:**Figure Channel 39:****Figure Channel 78:**

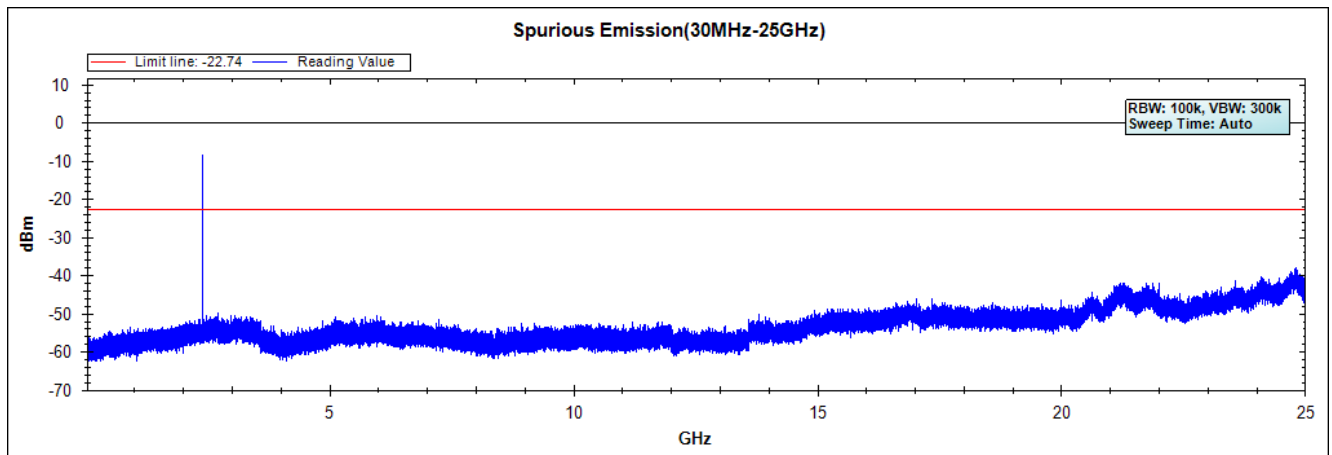
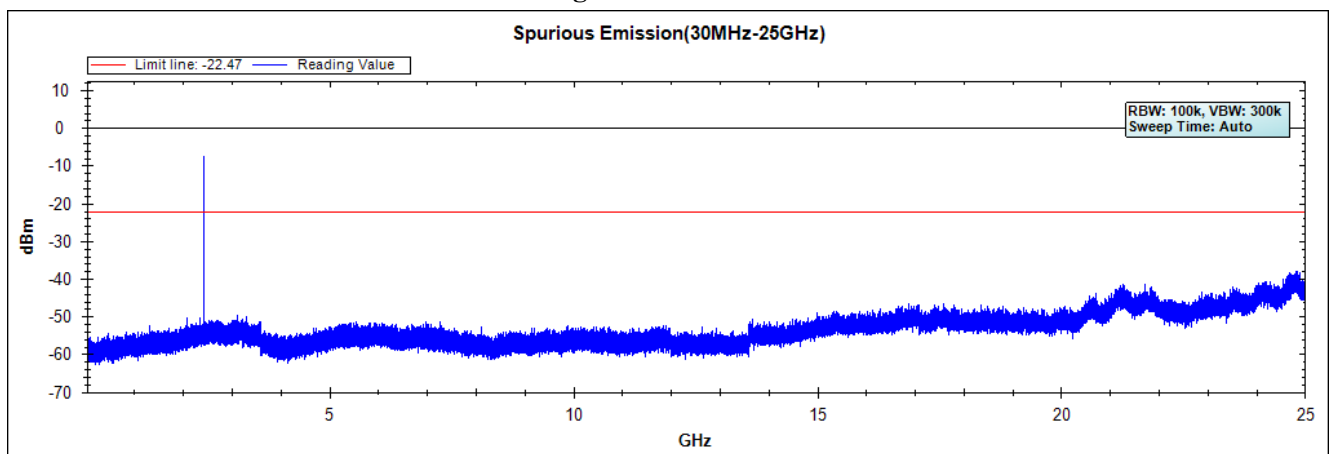
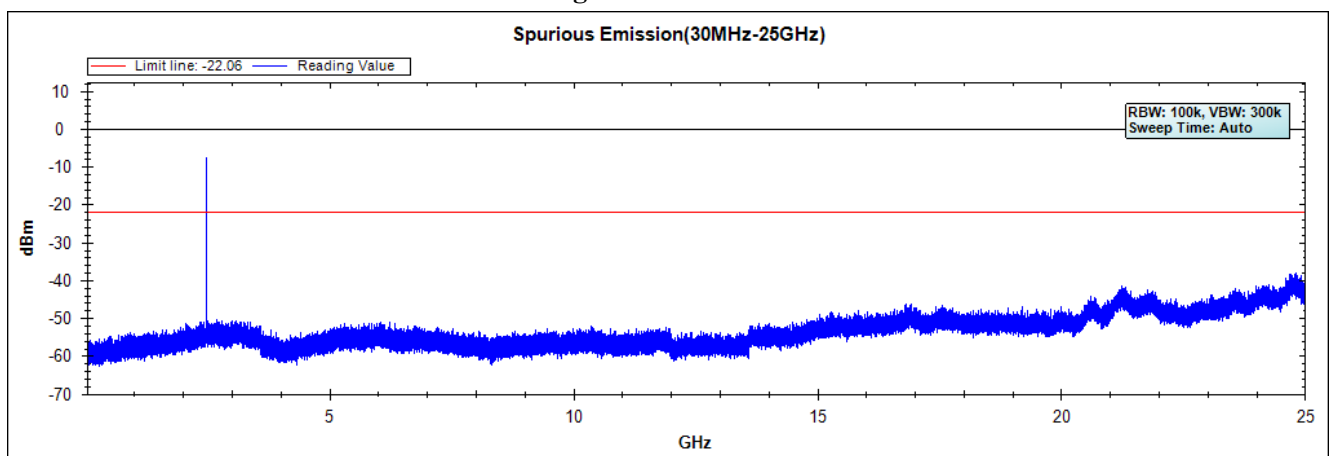
Note: The above test pattern is synthesized by multiple of the frequency range.

Product : Gaming headset
Test Item : RF Antenna Conducted Test
Test Mode : Mode 4: Transmit - 1Mbps-BLE
Test Date : 2020/10/26

Figure Channel 00:**Figure Channel 19:****Figure Channel 39:**

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

Product : Gaming headset
Test Item : RF Antenna Conducted Test
Test Mode : Mode 5: Transmit - 2Mbps-BLE
Test Date : 2020/10/26

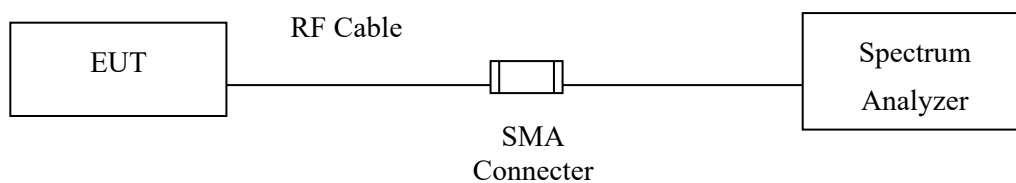
Figure Channel 00:**Figure Channel 19:****Figure Channel 39:**

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

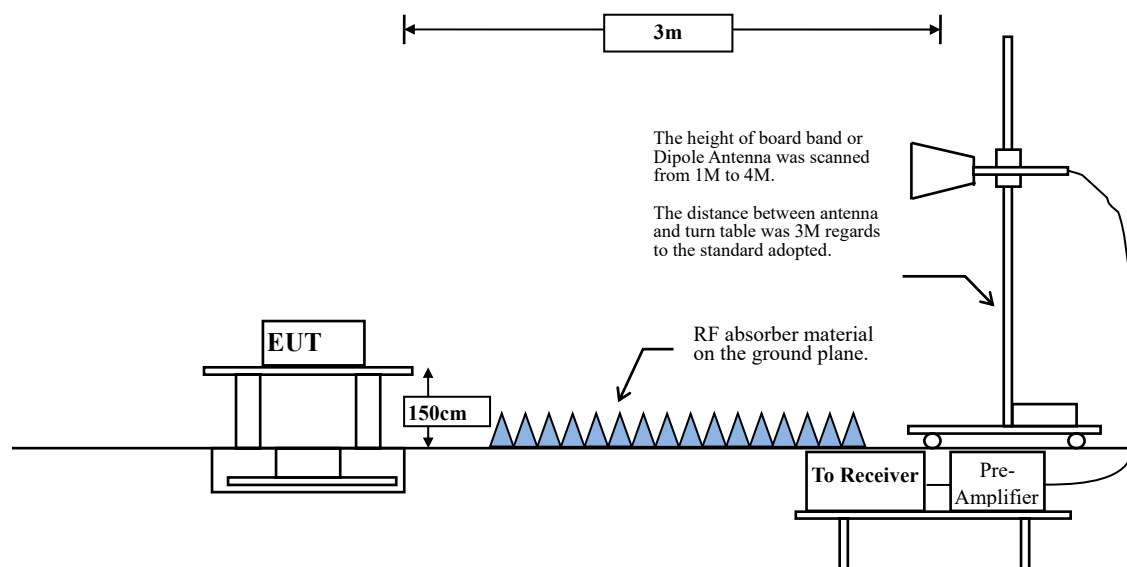
6. Band Edge

6.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.2. Limit

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 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz, respectively.

RBW and VBW Parameter setting:

According to C63.10 Section 11.12.2.4 Peak measurement procedure.

RBW = as specified in Table 1.

$VBW \geq 3 \times RBW$.

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.

$VBW = 10\text{Hz}$, when duty cycle $\geq 98\%$

$VBW \geq 1/T$, 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.)

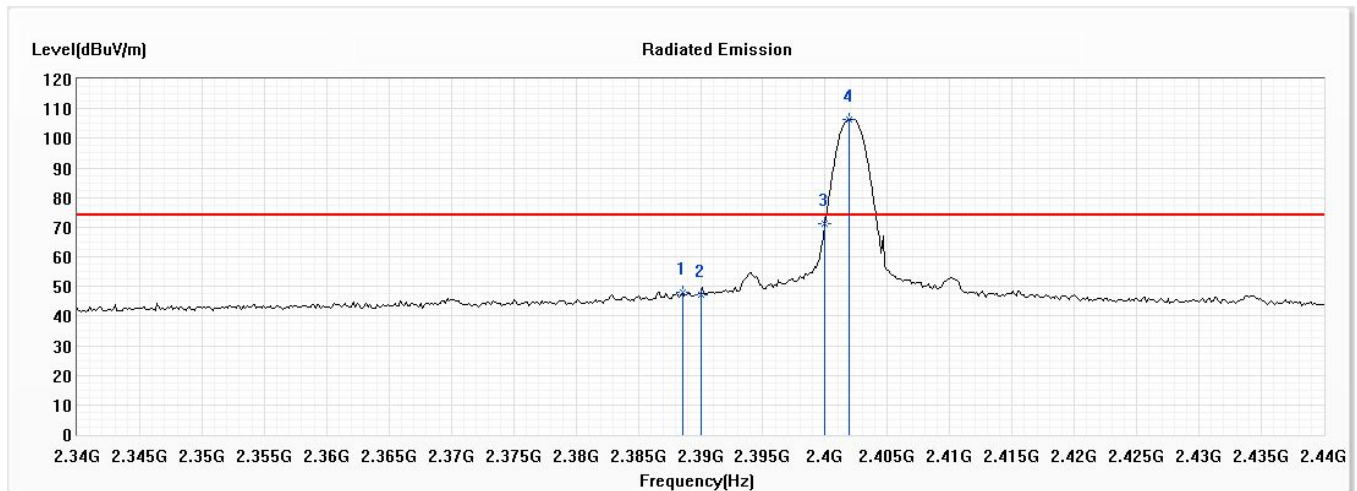
2.4GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
BLE 1Mbps	85.48	2.1371	468	500
BLE 2Mbps	57.68	1.0815	925	1k

Note: Duty Cycle Refer to Section 12

6.4. Test Result of Band Edge

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2020/11/02

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2388.551	48.08	74.00	-25.92	37.10	10.98	PK
2	2390.000	47.33	74.00	-26.67	36.34	10.99	PK
3	2400.000	71.04	--	--	60.00	11.04	PK
! 4	2401.884	106.24	--	--	95.18	11.06	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

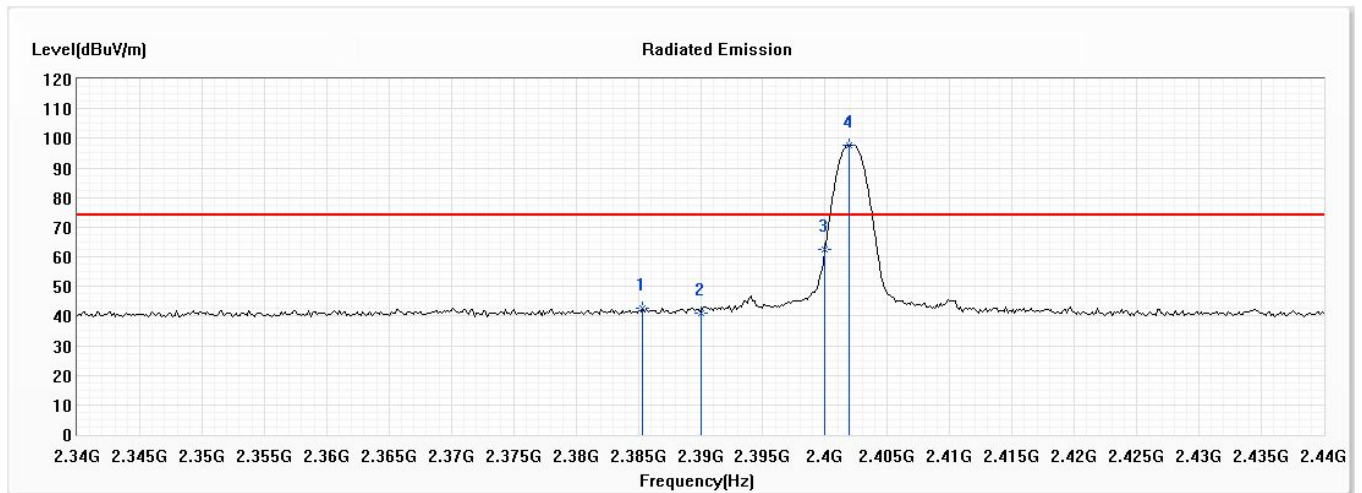
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2388.551	48.08	-30.752	17.328	-36.672	54.000	Pass
00 (Average)	2390	47.33	-30.752	16.578	-37.422	54.000	Pass
00 (Average)	2400	71.04	-30.752	40.288	--	--	Pass
00 (Average)	2401.884	106.24	-30.752	75.488	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2402MHz)
 Test Date : 2020/11/02

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2385.362	42.78	74.00	-31.22	31.81	10.97	PK
2	2390.000	41.00	74.00	-33.00	30.01	10.99	PK
3	2400.000	62.58	--	--	51.54	11.04	PK
! 4	2401.884	97.69	--	--	86.63	11.06	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

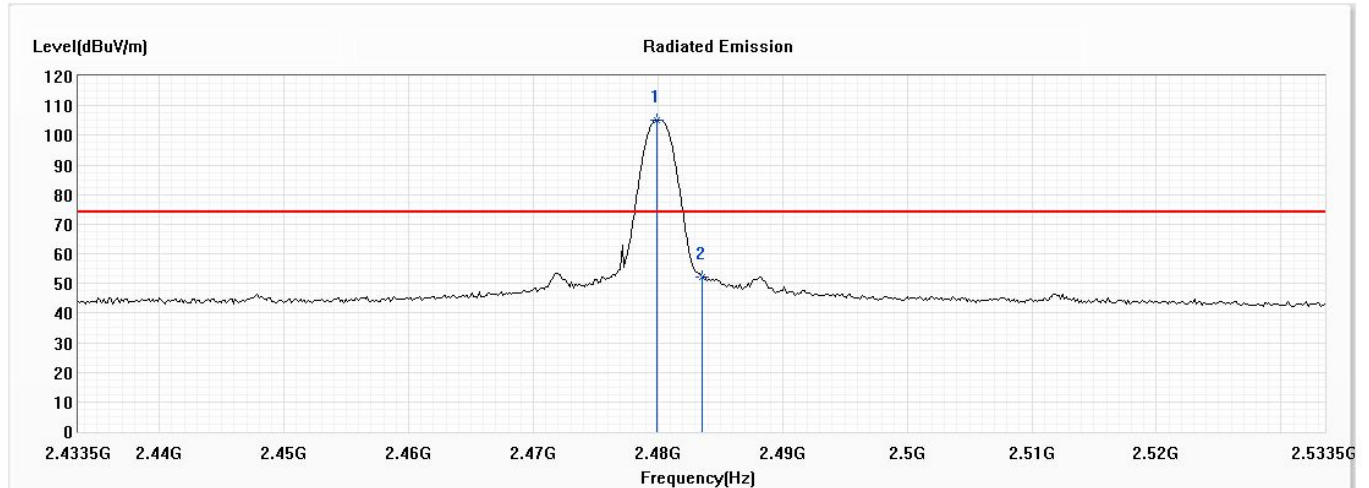
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2385.362	42.78	-30.752	12.028	-41.972	54.000	Pass
00 (Average)	2390	41	-30.752	10.248	-43.752	54.000	Pass
00 (Average)	2400	62.58	-30.752	31.828	--	--	Pass
00 (Average)	2401.884	97.69	-30.752	66.938	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2020/11/02

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2479.877	105.02	--	--	93.33	11.69	PK
2	2483.500	52.25	74.00	-21.75	40.54	11.71	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

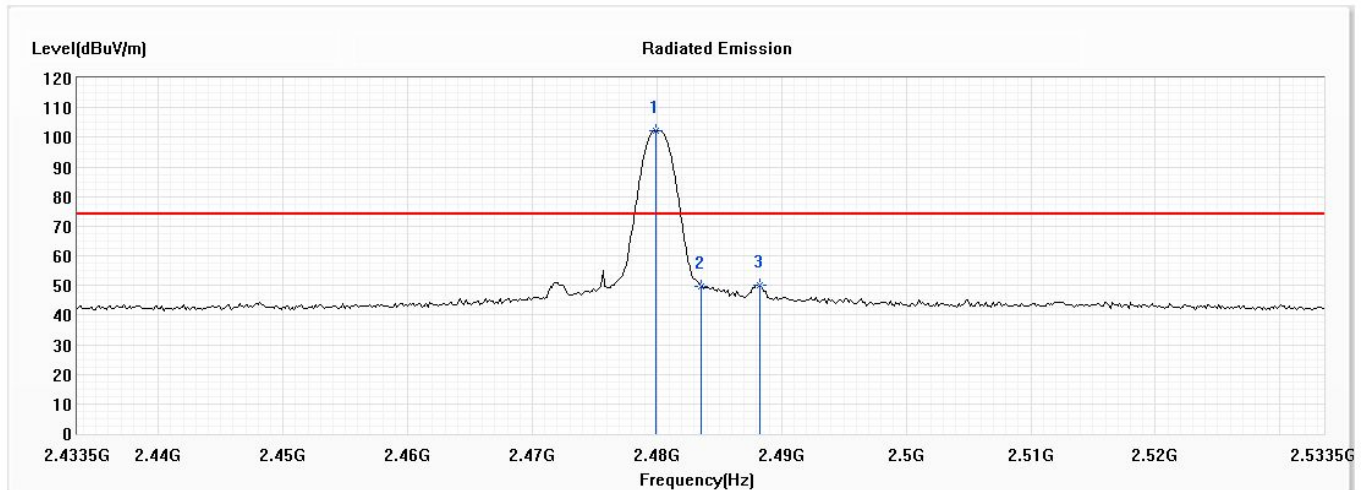
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.877	105.02	-30.752	74.268	--	--	Pass
78 (Average)	2483.5	52.25	-30.752	21.498	-32.502	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps (2480MHz)
 Test Date : 2020/11/02

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2479.877	102.26	--	--	90.57	11.69	PK
2	2483.500	49.72	74.00	-24.28	38.01	11.71	PK
3	2488.283	50.05	74.00	-23.95	38.31	11.74	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

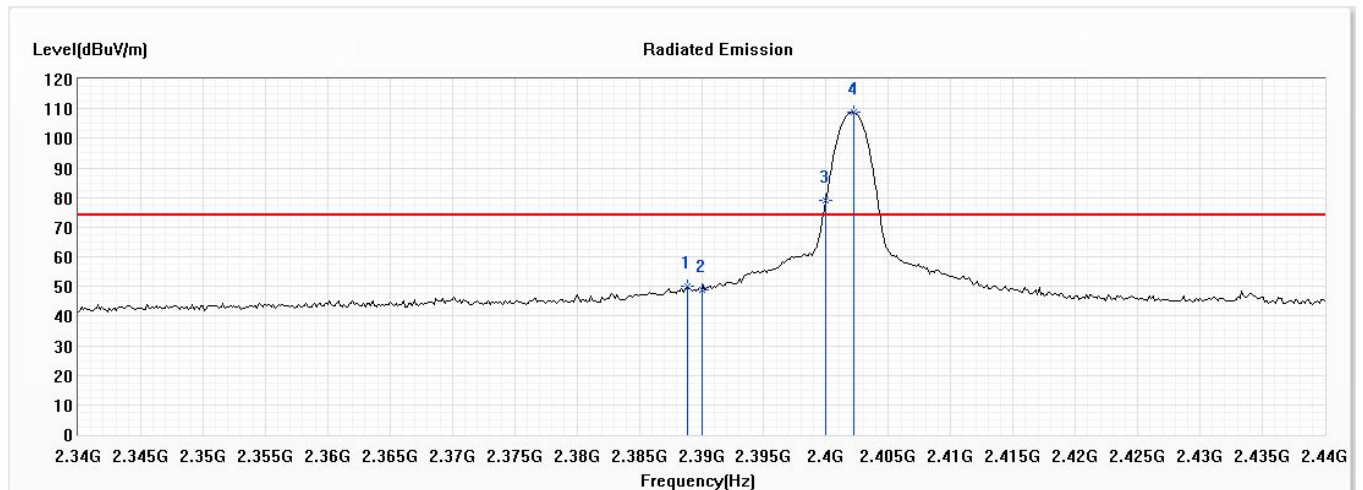
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2479.877	102.26	-30.752	71.508	--	--	Pass
78 (Average)	2483.5	49.72	-30.752	18.968	-35.032	54.000	Pass
78 (Average)	2488.283	50.05	-30.752	19.298	-34.702	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
 Test Date : 2020/11/02

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2388.841	49.95	74.00	-24.05	38.96	10.99	PK
2	2390.000	48.72	74.00	-25.28	37.73	10.99	PK
! 3	2400.000	78.90	--	--	67.86	11.04	PK
! 4	2402.174	108.67	--	--	97.61	11.06	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

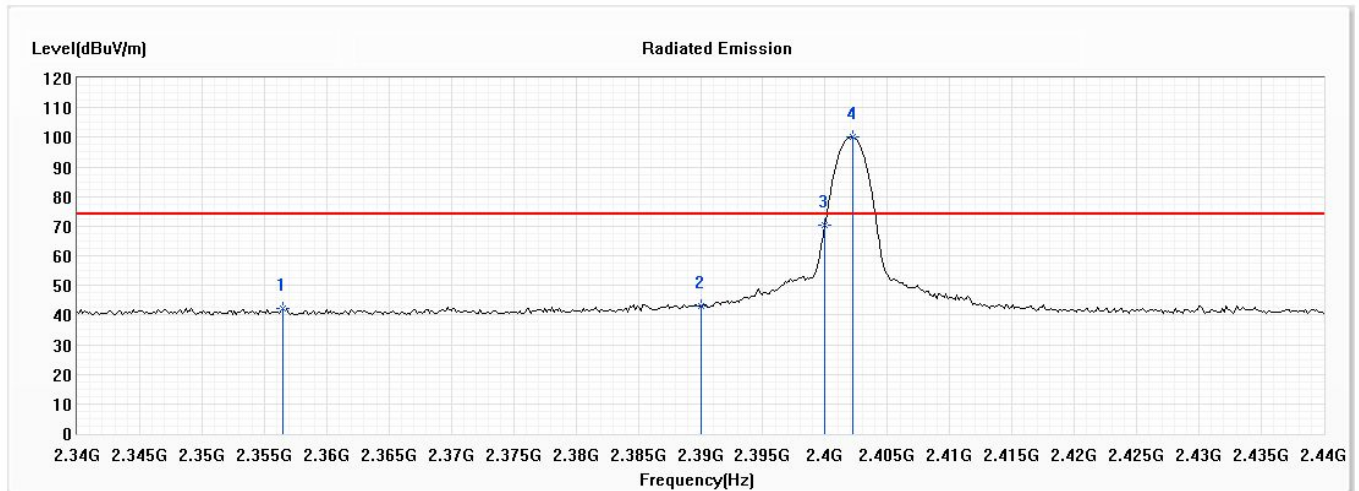
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2388.841	49.95	-30.752	19.198	-34.802	54.000	Pass
00 (Average)	2390	48.72	-30.752	17.968	-36.032	54.000	Pass
00 (Average)	2400	78.9	-30.752	48.148	--	--	Pass
00 (Average)	2402.174	108.67	-30.752	77.918	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2402MHz)
 Test Date : 2020/11/02

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2356.522	42.40	74.00	-31.60	31.59	10.81	PK
2	2390.000	42.85	74.00	-31.15	31.86	10.99	PK
3	2400.000	70.26	--	--	59.22	11.04	PK
! 4	2402.174	99.97	--	--	88.91	11.06	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

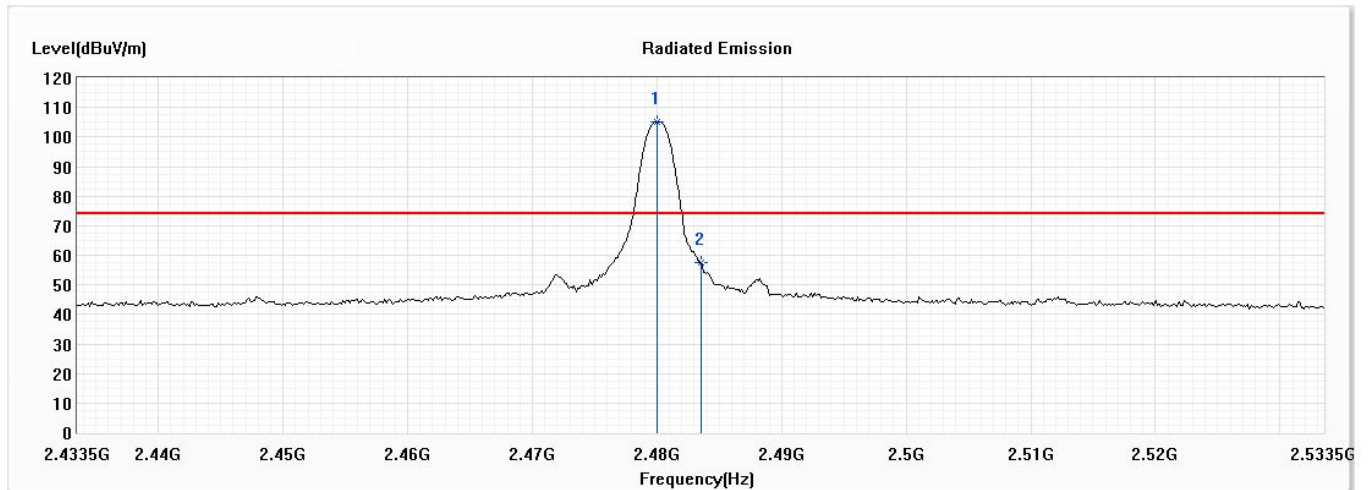
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
00 (Average)	2356.522	42.4	-30.752	11.648	-42.352	54.000	Pass
00 (Average)	2390	42.85	-30.752	12.098	-41.902	54.000	Pass
00 (Average)	2400	70.26	-30.752	39.508	--	--	Pass
00 (Average)	2402.174	99.97	-30.752	69.218	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2020/11/02

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2480.022	105.02	--	--	93.33	11.69	PK
2	2483.500	57.35	74.00	-16.65	45.64	11.71	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

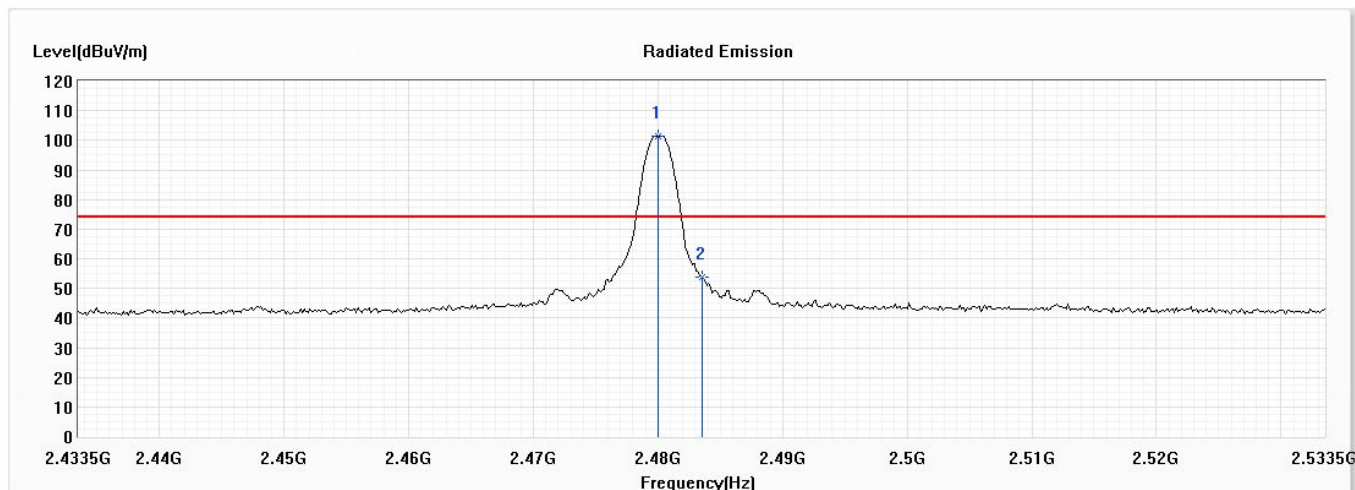
Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2480.022	105.02	-30.752	74.268	--	--	Pass
78 (Average)	2483.5	57.35	-30.752	26.598	-27.402	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (2480MHz)
 Test Date : 2020/11/02

Vertical



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2480.022	101.52	--	--	89.83	11.69	PK
2	2483.500	53.93	74.00	-20.07	42.22	11.71	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection.

Channel No.	Frequency (MHz)	Peak Measurement (dBm)	Duty Cycle Factor (dB)	Average Measurement (dBm)	Margin (dB)	Average Limit (dBm)	Result
78 (Average)	2480.022	101.52	-30.752	70.768	--	--	Pass
78 (Average)	2483.5	53.93	-30.752	23.178	-30.822	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 12.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps(Hopping off)
 Test Date : 2020/10/26

Measurement Level	Result
Δ (dB)	
> 20	PASS

Figure Channel 00:

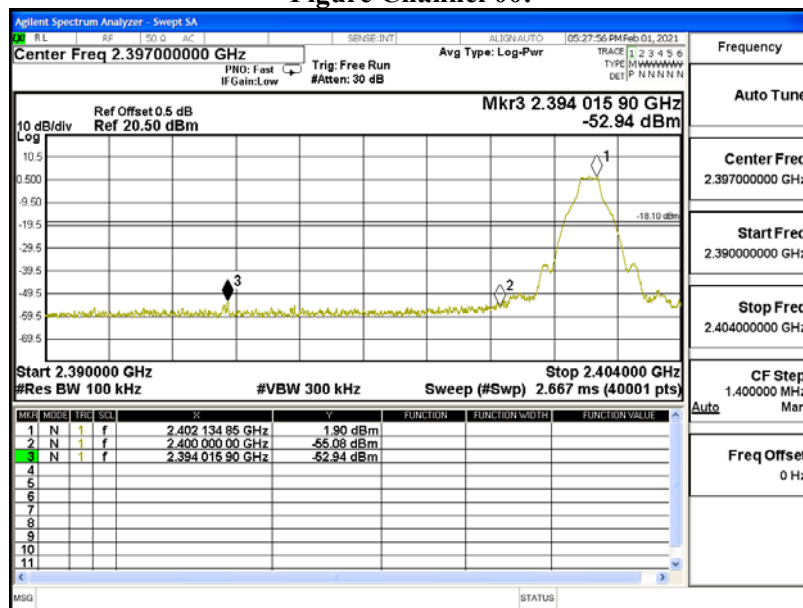
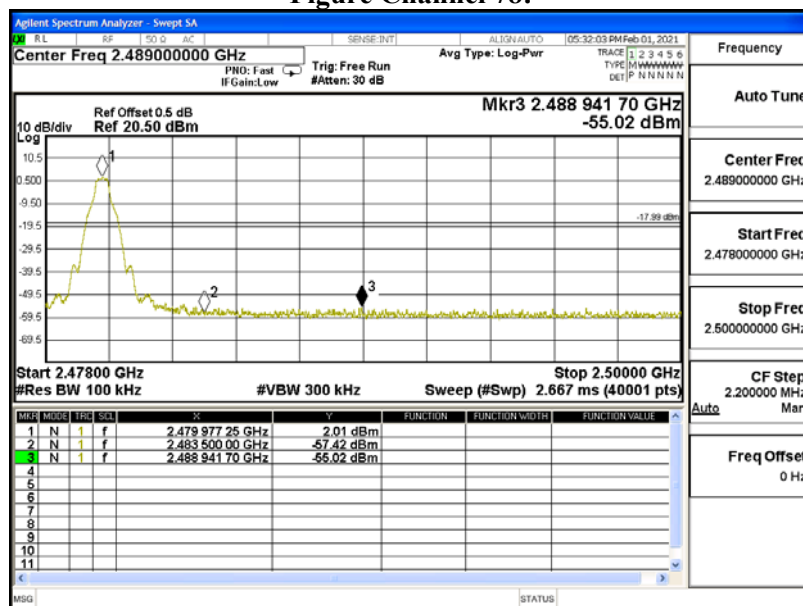


Figure Channel 78:



Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (Hopping off)
 Test Date : 2020/10/26

Measurement Level Δ (dB)	Result
> 20	PASS

Figure Channel 00:

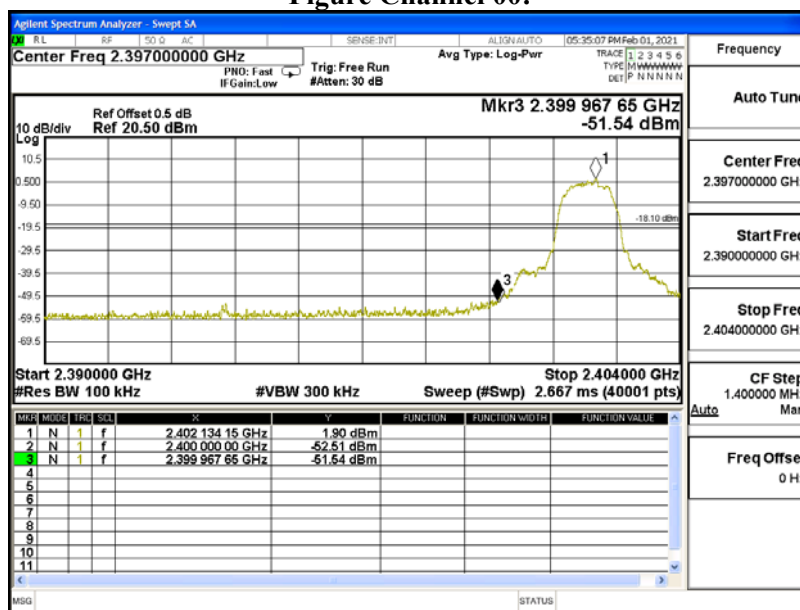
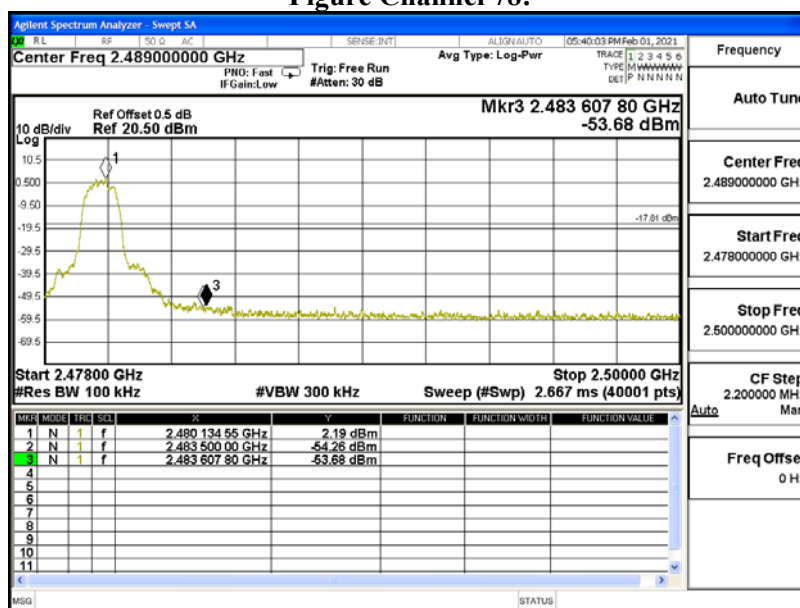


Figure Channel 78:



Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 1: Transmit - 1Mbps(Hopping on)
 Test Date : 2020/10/26

Measurement Level	Result
Δ (dB)	
> 20	PASS

Figure Channel Hopping:

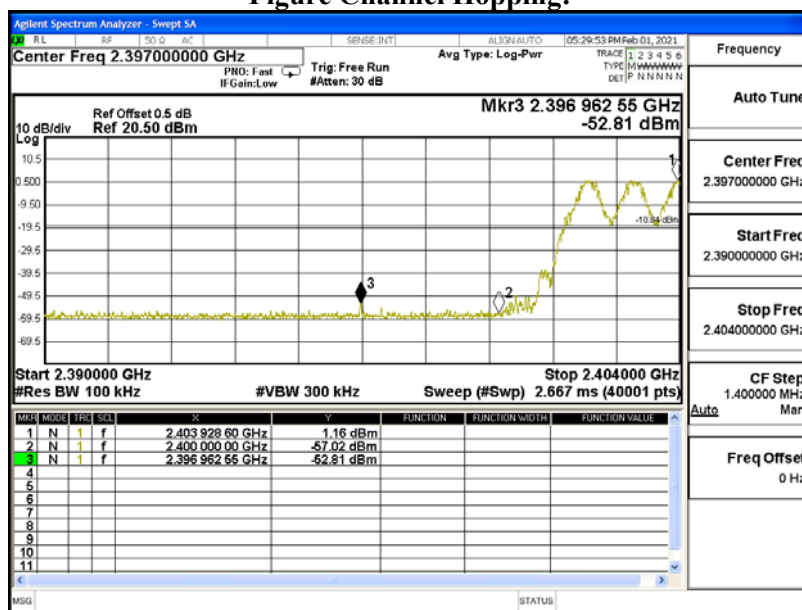
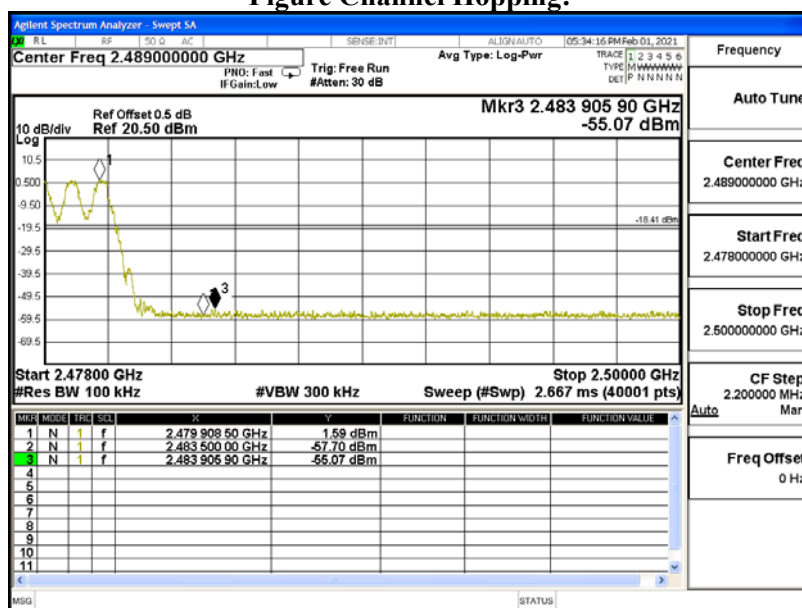


Figure Channel Hopping:



Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 3: Transmit - 3Mbps (Hopping on)
 Test Date : 2020/10/26

Measurement Level	Result
Δ (dB)	
> 20	PASS

Figure

Channel

Hopping:

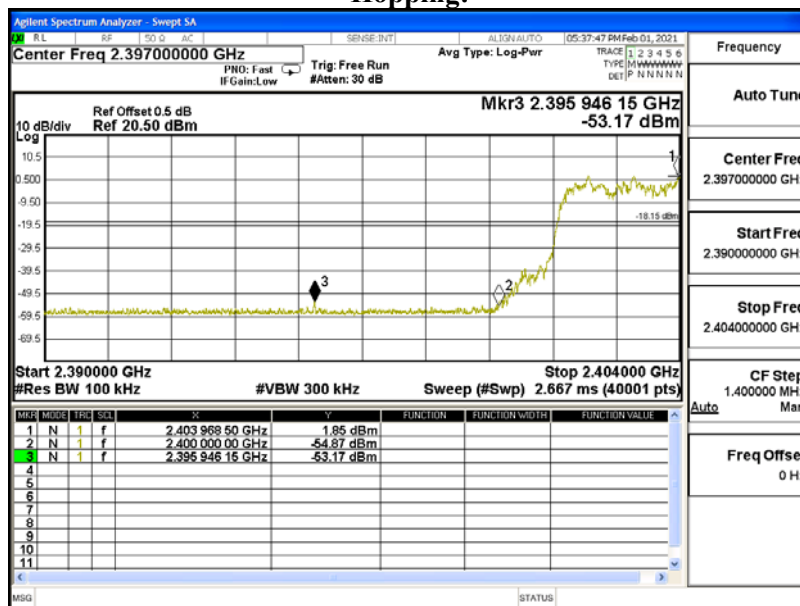
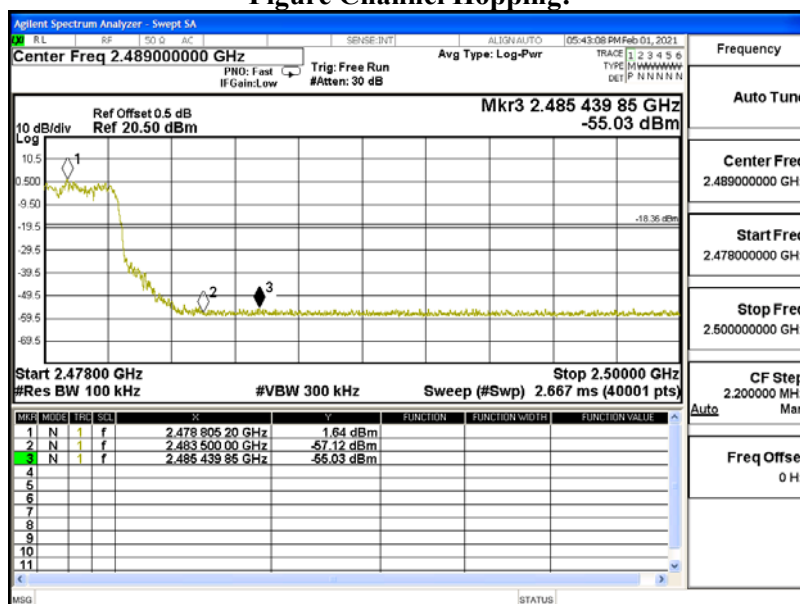
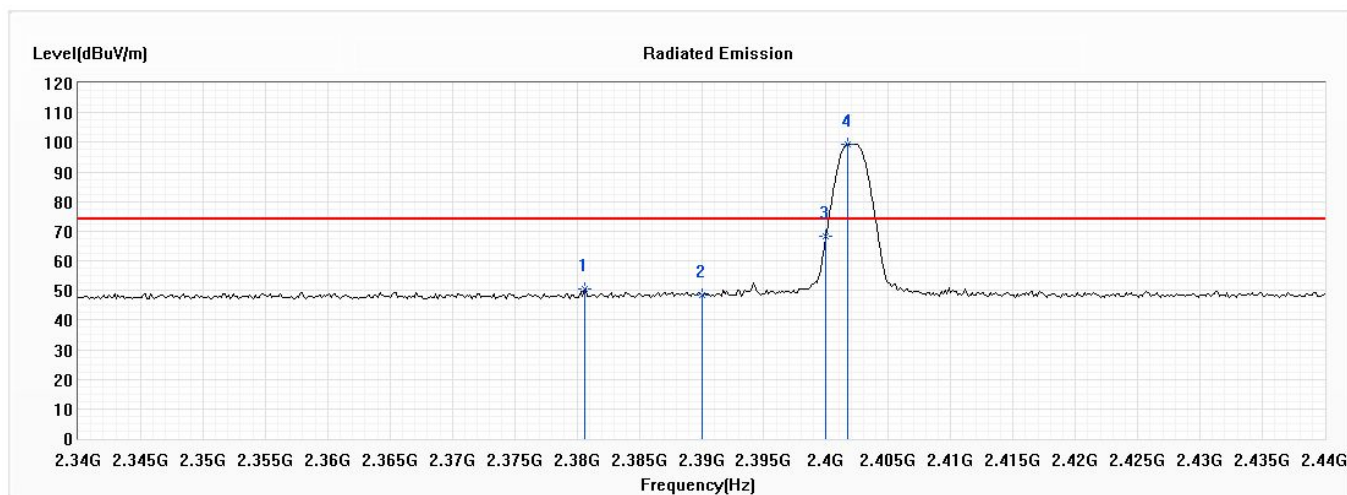


Figure Channel Hopping:



Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2402MHz)
 Test Date : 2020/11/02

Horizontal



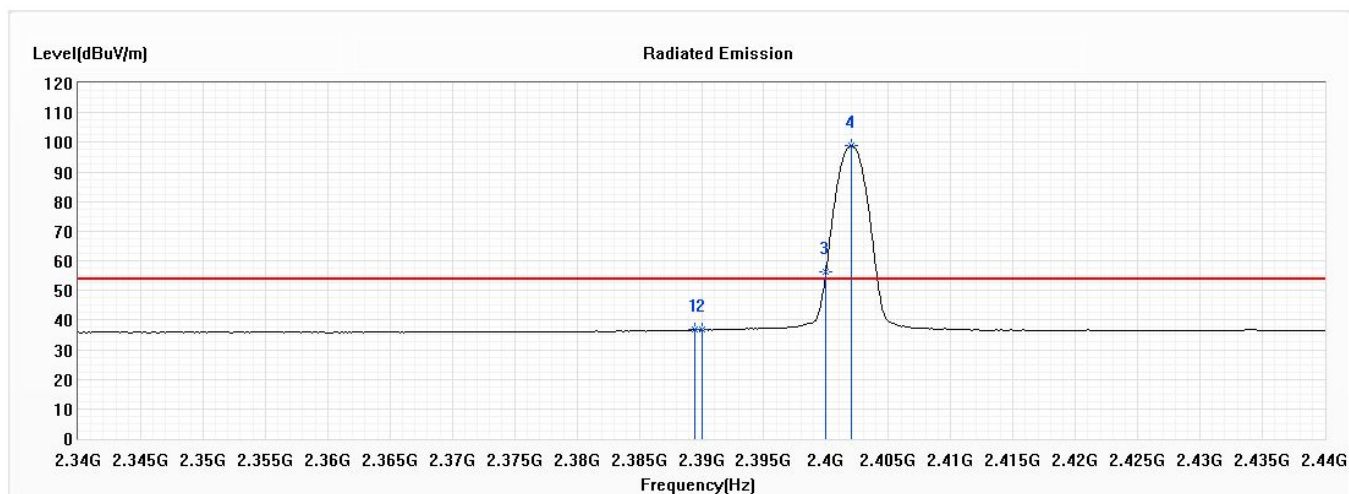
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2380.580	50.38	74.00	-23.62	39.44	10.94	PK
2	2390.000	48.40	74.00	-25.60	37.41	10.99	PK
3	2400.000	68.39	--	--	57.35	11.04	PK
! 4	2401.739	99.42	--	--	88.37	11.05	PK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.

Product : Gaming headset
 Test Item : Band Edge
 Test Mode : Mode 4: Transmit - 1Mbps-BLE (2402MHz)
 Test Date : 2020/11/02

Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2389.420	36.74	54.00	-17.26	25.75	10.99	AV
2	2390.000	36.67	54.00	-17.33	25.68	10.99	AV
! 3	2400.000	56.12	--	--	45.08	11.04	AV
! 4	2402.029	98.77	--	--	87.71	11.06	AV

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor.
3. The average measurement was not performed when the peak measured data under the limit of average detection.