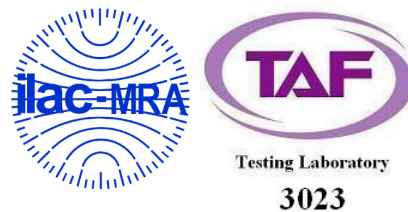


# FCC Test Report

Product Name	TUF GAMING H1 WIRELESS
Model No.	TUF GAMING H1 WL
FCC ID	BJM-TH1W

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

Date of Receipt	Jun. 27, 2021
Issued Date	Jul. 29, 2021
Report No.	2161093R-E3032110120
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.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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

Issued Date: Jul. 29, 2021

Report No.: 2161093R-E3032110120



Product Name	TUF GAMING H1 WIRELESS
Applicant	Tatung Company
Address	22 Chungshan N Road Sec 3 ,Taipei 10451,Taiwan
Manufacturer	Tatung Company
Model No.	TUF GAMING H1 WL
FCC ID	BJM-TH1W
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 : Genie Chang  
( Senior Project Specialist / Genie Chang )

Tested By : Ivan Chuang  
( Senior Engineer / Ivan Chuang )

Approved By : Alan Chen  
( Senior Engineer / Alan Chen )

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## Revision History

Report No.	Version	Description	Issued Date
2161093R-E3032110120	V1.0	Initial issue of report.	2021-07-28

## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name	TUF GAMING H1 WIRELESS
Trade Name	ASUS
Model No.	TUF GAMING H1 WL
FCC ID	BJM-TH1W
Frequency Range	2403.35-2477.35MHz
Channel Number	38CH
Type of Modulation	Pi/4 DQPSK
Antenna Type	PCB Antenna
Antenna Gain	Refer to the table "Antenna List"
Channel Control	Auto
USB to Type-C Cable	MFR: ASUS, M/N: TUF GAMING H1 WL, Shielded, 1m
Connecter	MFR: ASUS, M/N: TUF GAMING H1 WL

#### Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Advanced Ceramic X Corp.	N/A (Antenna 1) (Antenna 2)	PCB Antenna	3.1dBi for 2.4GHz

Note: The antenna of EUT is conform to FCC 15.203

**Center Frequency of Each Channel:**

Channel	Frequency	Channel	Frequency
Channel 01:	2403.35MHz	Channel 21:	2443.35MHz
Channel 02:	2405.35MHz	Channel 22:	2445.35MHz
Channel 03:	2407.35MHz	Channel 23:	2447.35MHz
Channel 04:	2409.35MHz	Channel 24:	2449.35MHz
Channel 05:	2411.35MHz	Channel 25:	2451.35MHz
Channel 06:	2413.35MHz	Channel 26:	2453.35MHz
Channel 07:	2415.35MHz	Channel 27:	2455.35MHz
Channel 08:	2417.35MHz	Channel 28:	2457.35MHz
Channel 09:	2419.35MHz	Channel 29:	2459.35MHz
Channel 10:	2421.35MHz	Channel 30:	2461.35MHz
Channel 11:	2423.35MHz	Channel 31:	2463.35MHz
Channel 12:	2425.35MHz	Channel 32:	2465.35MHz
Channel 13:	2427.35MHz	Channel 33:	2467.35MHz
Channel 14:	2429.35MHz	Channel 34:	2469.35MHz
Channel 15:	2431.35MHz	Channel 35:	2471.35MHz
Channel 16:	2433.35MHz	Channel 36:	2473.35MHz
Channel 17:	2435.35MHz	Channel 37:	2475.35MHz
Channel 18:	2437.35MHz	Channel 38:	2477.35MHz
Channel 19:	2439.35MHz		
Channel 20:	2441.35MHz		

**Note:**

1. The EUT is a TUF GAMING H1 WIRELESS with a built-in 2.4GHz wireless transceiver.
2. The EUT support diversity function. The worst case (Antenna 1 and Antenna 2) is shown in the report.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. These tests are conducted on a sample of the equipment for the purpose of demonstrating compliance of transmitter with Part 15 Subpart C Paragraph 15.249 for spread spectrum devices.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit Mode 2: Normal mode
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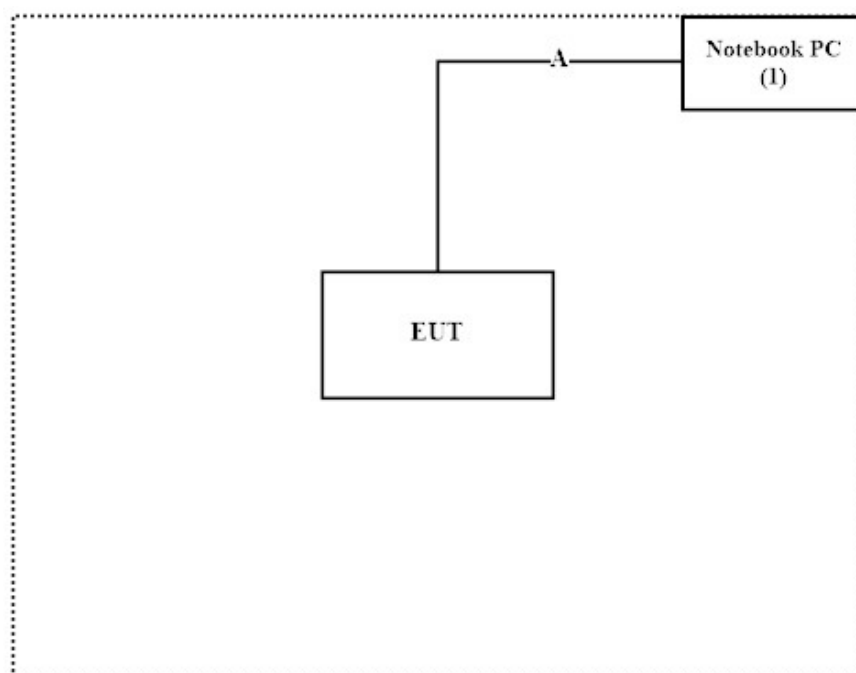
## 1.2. Tested System Details

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	Latitude 5501	GS9GL13	N/A

Signal Cable Type	Signal cable Description
A   USB Cable	Shielded, 1m

## 1.3. Configuration of Test System



## 1.4. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.3.
- (2) Execute “RF Power Version 2020.11.4.1” program on the Notebook PC.
- (3) Configure the test mode and the test channel
- (4) 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	29.8°C
	Humidity (%RH)	10~90 %	54.2%
Radiated Emission	Temperature (°C)	10~40 °C	23.9°C
	Humidity (%RH)	10~90 %	64.4%
Conductive	Temperature (°C)	10~40 °C	22°C
	Humidity (%RH)	10~90 %	55%

**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 : +886-3-275-7255  
Fax number : +866-3-327-5505  
Email address : [info.tw@dekra.com](mailto:info.tw@dekra.com)  
Website : <http://www.dekra.com.tw>



## 1.6. List of Test Equipment

### For Conduction measurements /SH1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
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 /SH2

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103466	2021.02.11	2022.02.11
	Peak Power Analyzer	KEYSIGHT	8900B	MY51000539	2021.06.07	2022.06.06
	Power Sensor	KEYSIGHT	N1923A	MY59240002	2021.05.17	2022.05.16
	Power Sensor	KEYSIGHT	N1923A	MY59240003	2021.05.17	2022.05.16

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 /966-3

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	AMETEK	HLA6121	49611	2021.04.14	2021.03.15
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-678	2020.09.04	2021.01.02
X	Horn Antenna	ETS-Lindgren	3117	00201259	2020.10.23	2021.10.22
X	Horn Antenna	Com-Power	AH-840	101087	2020.06.08	2021.06.07
X	Pre-Amplifier	EMCI	EMC001330	980254	2021.01.20	2022.01.19
X	Pre-Amplifier	EMCI	EMC051835SE	980313	2020.11.25	2021.11.24
X	Pre-Amplifier	EMCI	EMC05820SE	980309	2020.09.26	2021.09.25
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2021.06.24	2022.06.23
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	101602	2020.12.17	2021.12.16
X	Spectrum Analyzer	R&S	FSV40	101148	2021.02.03	2022.02.02
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2021.03.03	2022.03.02
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2021.06.24	2022.06.23

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

## 1.7. Uncertainty

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

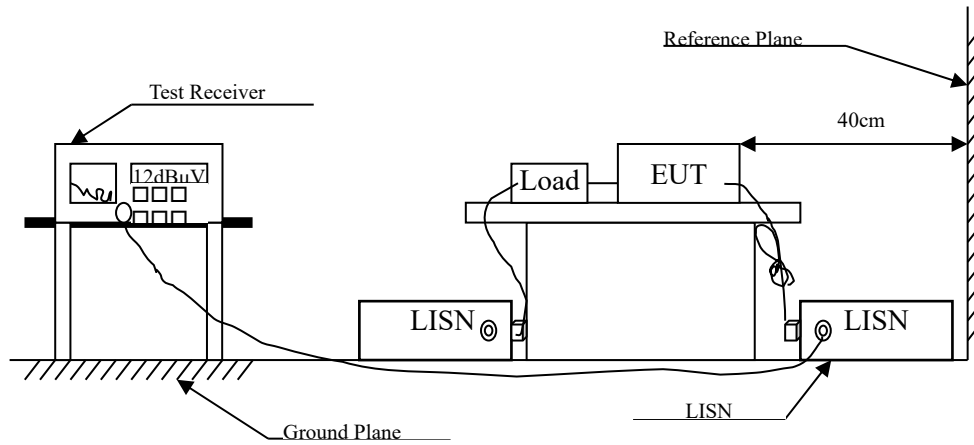
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95%.

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	$\pm 3.42$ dB	
Radiated Emission	Under 1GHz $\pm 4.06$ dB	Above 1GHz $\pm 3.73$ dB
Band Edge	Under 1GHz $\pm 4.06$ dB	Above 1GHz $\pm 3.73$ dB
Duty Cycle	$\pm 2.31$ ms	

## 2. Conducted Emission

### 2.1. Test Setup



### 2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dB $\mu$ 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

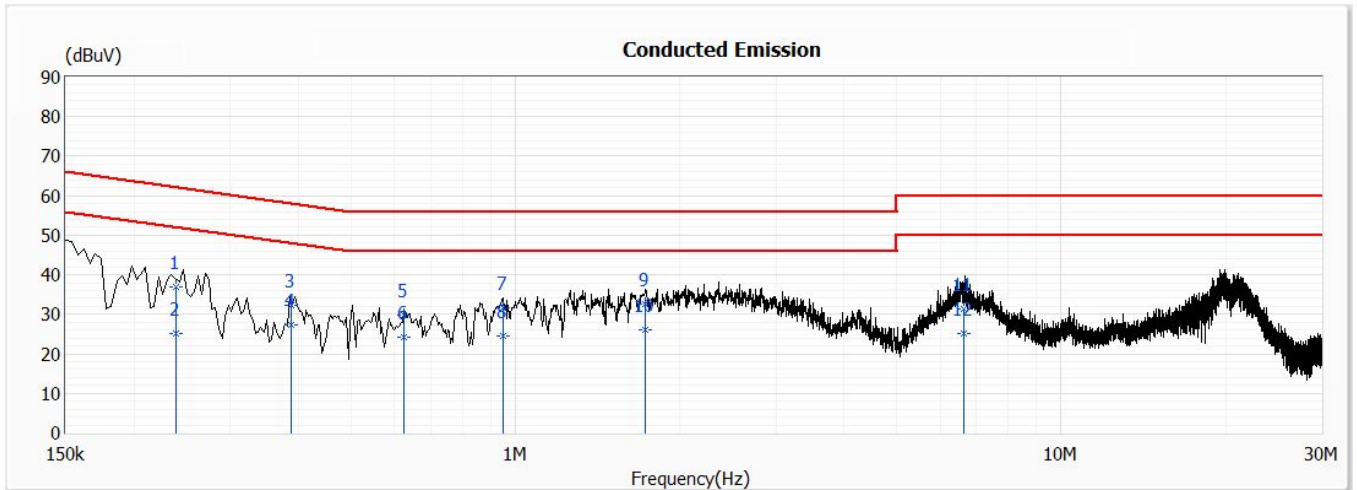
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling 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 investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

## 2.4. Test Result of Conducted Emission

Product : TUF GAMING H1 WIRELESS  
 Test Item : Conducted Emission Test  
 Power Line : L 1  
 Test Date : 2021/06/29  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

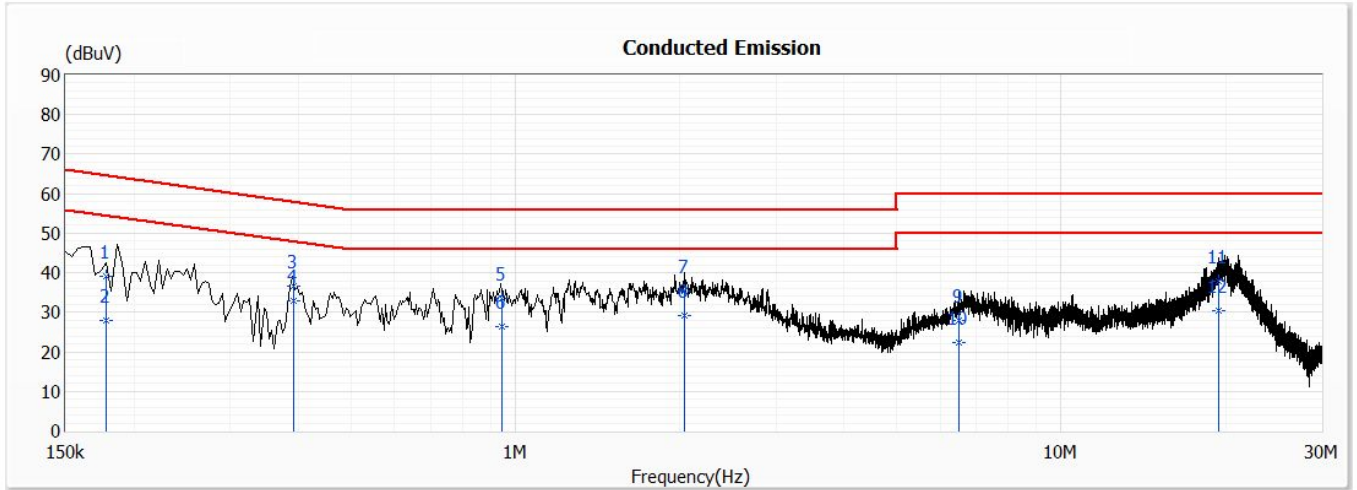


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.239	36.93	62.14	-25.21	27.28	9.65	QP
2	0.239	25.15	52.14	-26.99	15.50	9.65	AV
3	0.388	32.32	58.10	-25.78	22.66	9.66	QP
4	0.388	27.25	48.10	-20.85	17.59	9.66	AV
5	0.625	29.67	56.00	-26.33	20.00	9.67	QP
6	0.625	24.27	46.00	-21.73	14.60	9.67	AV
7	0.949	31.54	56.00	-24.46	21.85	9.69	QP
8	0.949	24.37	46.00	-21.63	14.68	9.69	AV
9	1.729	32.71	56.00	-23.29	23.00	9.71	QP
*10	1.729	26.01	46.00	-19.99	16.30	9.71	AV
11	6.644	31.49	60.00	-28.51	21.66	9.83	QP
12	6.644	25.06	50.00	-24.94	15.23	9.83	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 : TUF GAMING H1 WIRELESS  
 Test Item : Conducted Emission Test  
 Power Line : N  
 Test Date : 2021/06/29  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

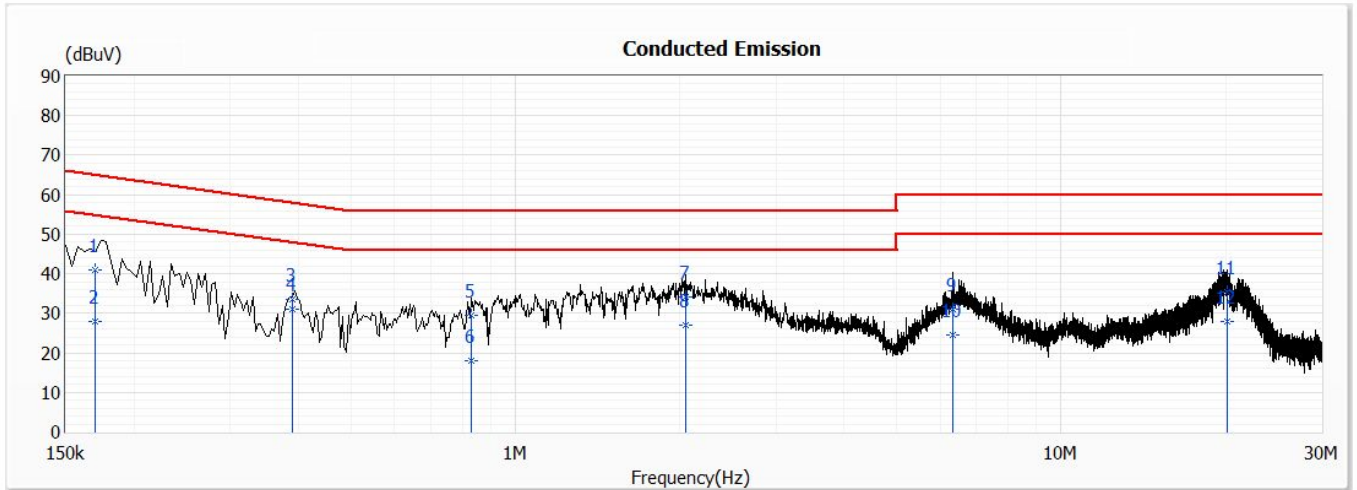


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.178	39.16	64.58	-25.42	29.49	9.67	QP
2	0.178	27.82	54.58	-26.76	18.15	9.67	AV
3	0.393	36.69	58.01	-21.32	27.02	9.67	QP
*4	0.393	32.80	48.01	-15.21	23.13	9.67	AV
5	0.947	33.41	56.00	-22.59	23.72	9.69	QP
6	0.947	26.30	46.00	-19.70	16.61	9.69	AV
7	2.036	35.51	56.00	-20.49	25.78	9.73	QP
8	2.036	29.10	46.00	-16.90	19.37	9.73	AV
9	6.484	27.91	60.00	-32.09	18.08	9.83	QP
10	6.484	22.39	50.00	-27.61	12.56	9.83	AV
11	19.461	37.86	60.00	-22.14	27.81	10.05	QP
12	19.461	30.32	50.00	-19.68	20.27	10.05	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 : TUF GAMING H1 WIRELESS  
 Test Item : Conducted Emission Test  
 Power Line : L 1  
 Test Date : 2021/06/29  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)

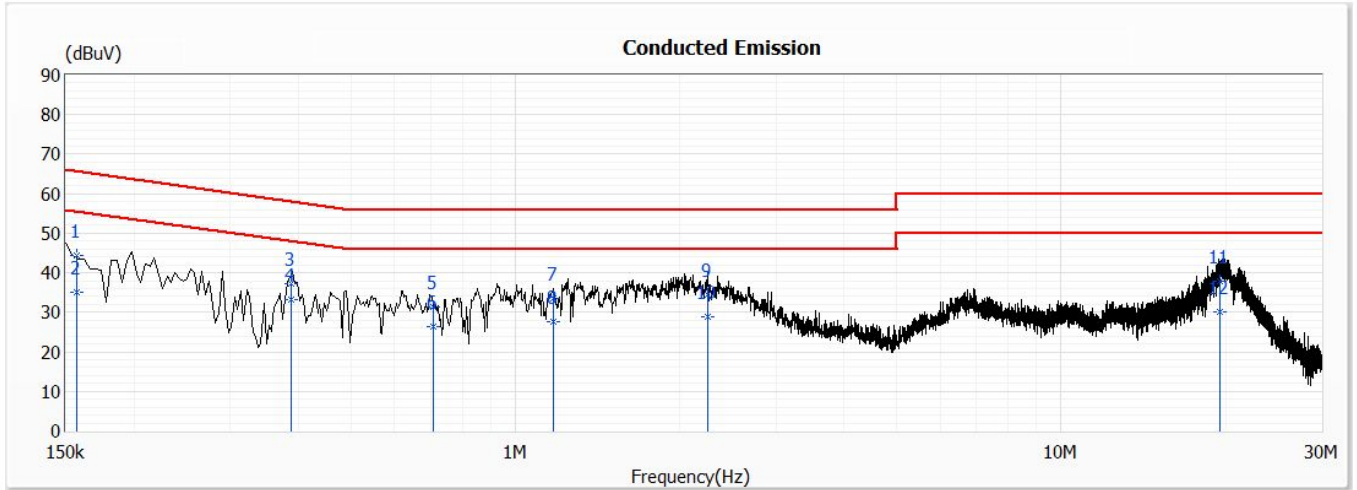


No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.170	40.98	64.98	-24.00	31.32	9.66	QP
2	0.170	27.93	54.98	-27.05	18.27	9.66	AV
3	0.390	33.66	58.06	-24.40	24.00	9.66	QP
*4	0.390	31.08	48.06	-16.98	21.42	9.66	AV
5	0.831	29.35	56.00	-26.65	19.67	9.68	QP
6	0.831	17.97	46.00	-28.03	8.29	9.68	AV
7	2.054	34.03	56.00	-21.97	24.31	9.72	QP
8	2.054	27.12	46.00	-18.88	17.40	9.72	AV
9	6.323	31.14	60.00	-28.86	21.32	9.82	QP
10	6.323	24.53	50.00	-25.47	14.71	9.82	AV
11	20.171	35.43	60.00	-24.57	25.46	9.97	QP
12	20.171	27.86	50.00	-22.14	17.89	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 : TUF GAMING H1 WIRELESS  
 Test Item : Conducted Emission Test  
 Power Line : N  
 Test Date : 2021/06/29  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)



No	Frequency (MHz)	Emission Level (dBuV)	Limit (dBuV)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	0.157	44.46	65.60	-21.14	34.79	9.67	QP
2	0.157	35.05	55.60	-20.55	25.38	9.67	AV
3	0.389	37.28	58.09	-20.81	27.61	9.67	QP
*4	0.389	33.29	48.09	-14.80	23.62	9.67	AV
5	0.709	31.22	56.00	-24.78	21.54	9.68	QP
6	0.709	26.28	46.00	-19.72	16.60	9.68	AV
7	1.172	33.43	56.00	-22.57	23.73	9.70	QP
8	1.172	27.48	46.00	-18.52	17.78	9.70	AV
9	2.253	34.57	56.00	-21.43	24.83	9.74	QP
10	2.253	29.01	46.00	-16.99	19.27	9.74	AV
11	19.502	37.88	60.00	-22.12	27.83	10.05	QP
12	19.502	29.95	50.00	-20.05	19.90	10.05	AV

Note:

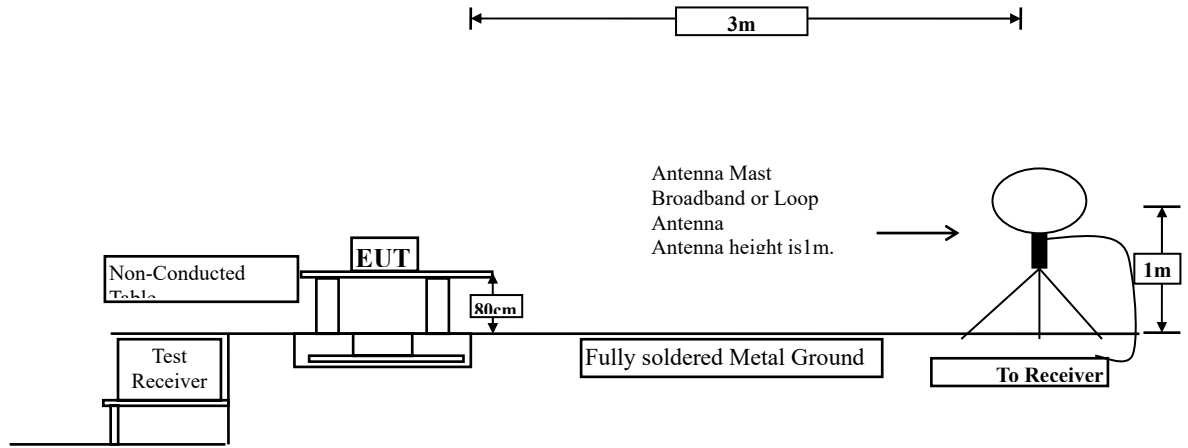
1. All Reading Levels are Quasi-Peak and average value.
2. “ \* “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



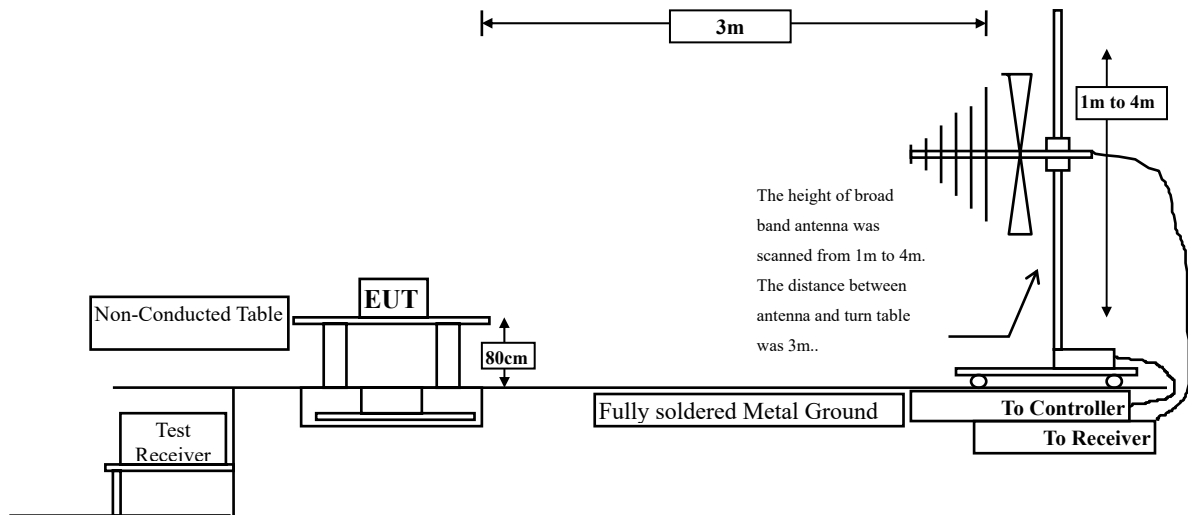
### 3. Radiated Emission

#### 3.1. Test Setup

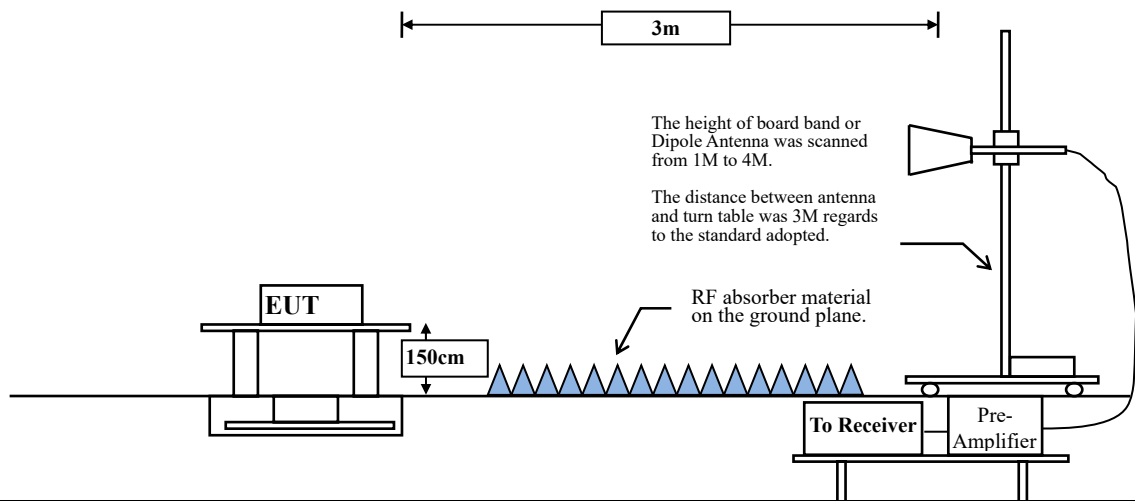
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



### 3.2. Limits

#### ➤ Fundamental and Harmonics Emission Limits

<b>FCC Part 15 Subpart C Paragraph 15.249 Limits</b>				
Frequency MHz	Field Strength of Fundamental		Field Strength of Harmonics	
	(mV/m @3m)	(dB $\mu$ V /m @3m)	(uV/m @3m)	(dB $\mu$ V /m @3m)
902-928	50	94	500	54
2400-2483.5	50	94	500	54
5725-5875	50	94	500	54
24000-24250	250	108	2500	68

- Remarks :
1. RF Voltage (dB $\mu$ V /m) = 20 log RF Voltage (uV/m)
  2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

#### ➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

<b>FCC Part 15 Subpart C Paragraph 15.209(a) Limits</b>		
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: E field strength (dB $\mu$ V /m) = 20 log E field strength (uV/m)

### 3.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested compliance to FCC 47CFR 15.249 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.

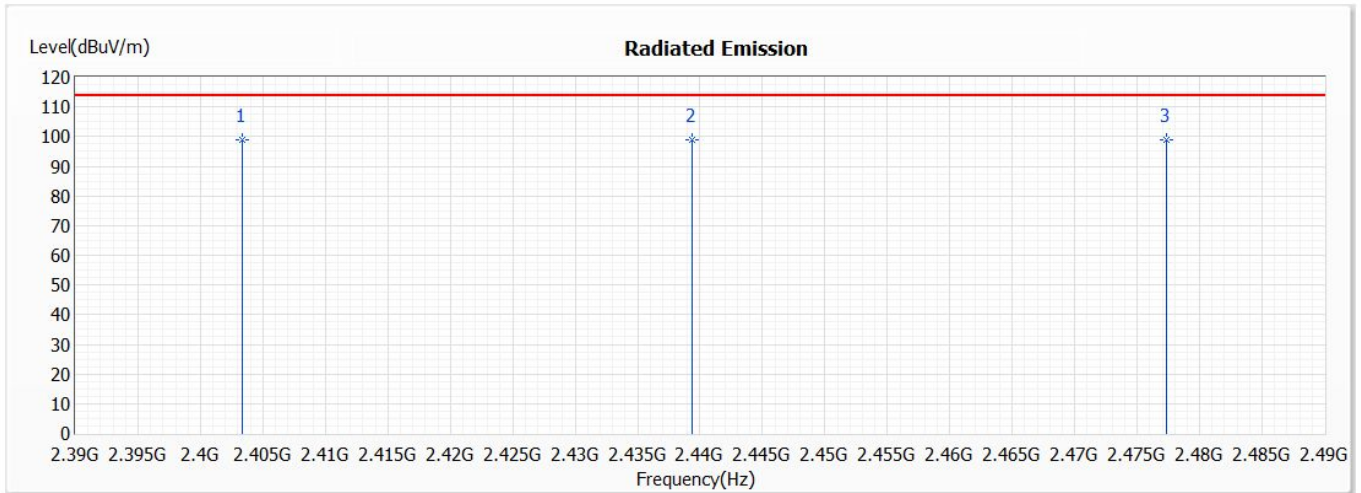
The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the 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.

### 3.4. Test Result of Radiated Emission

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

#### Horizontal\_X-Axis



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2403.350	98.95	114.00	-15.05	86.47	12.48	PK
2	2439.350	98.93	114.00	-15.07	86.34	12.59	PK
* 3	2477.350	99.07	114.00	-14.93	86.37	12.70	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.

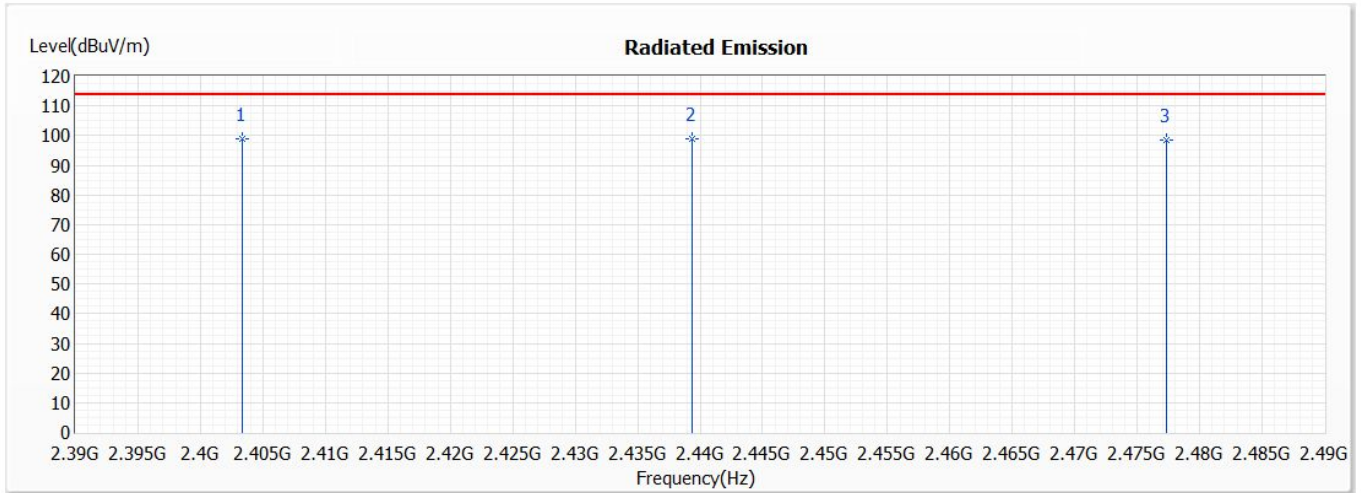
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	98.950	-40.382	58.568	-35.432	94.000
2439.350	98.930	-40.382	58.548	-35.452	94.000
2477.350	99.070	-40.382	58.688	-35.312	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

**Vertical\_X-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2403.350	98.83	114.00	-15.17	86.35	12.48	PK
* 2	2439.350	98.84	114.00	-15.16	86.25	12.59	PK
3	2477.350	98.67	114.00	-15.33	85.97	12.70	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.

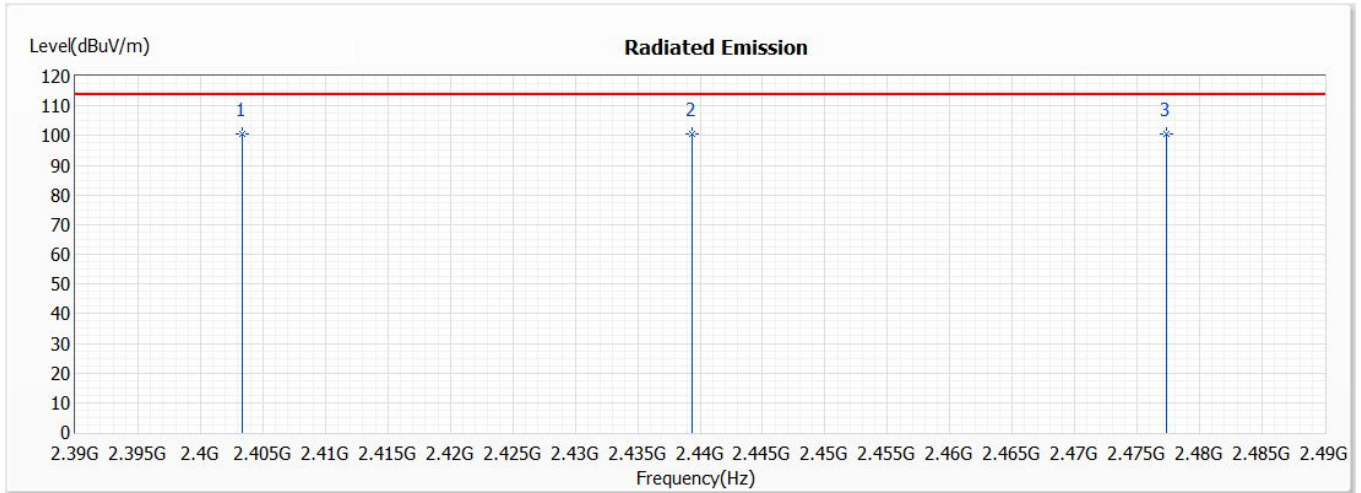
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	98.830	-40.382	58.448	-35.552	94.000
2439.350	98.840	-40.382	58.458	-35.542	94.000
2477.350	98.670	-40.382	58.288	-35.712	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

**Horizontal\_Y-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2403.350	100.59	114.00	-13.41	88.11	12.48	PK
* 2	2439.350	100.60	114.00	-13.40	88.01	12.59	PK
3	2477.350	100.49	114.00	-13.51	87.79	12.70	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.

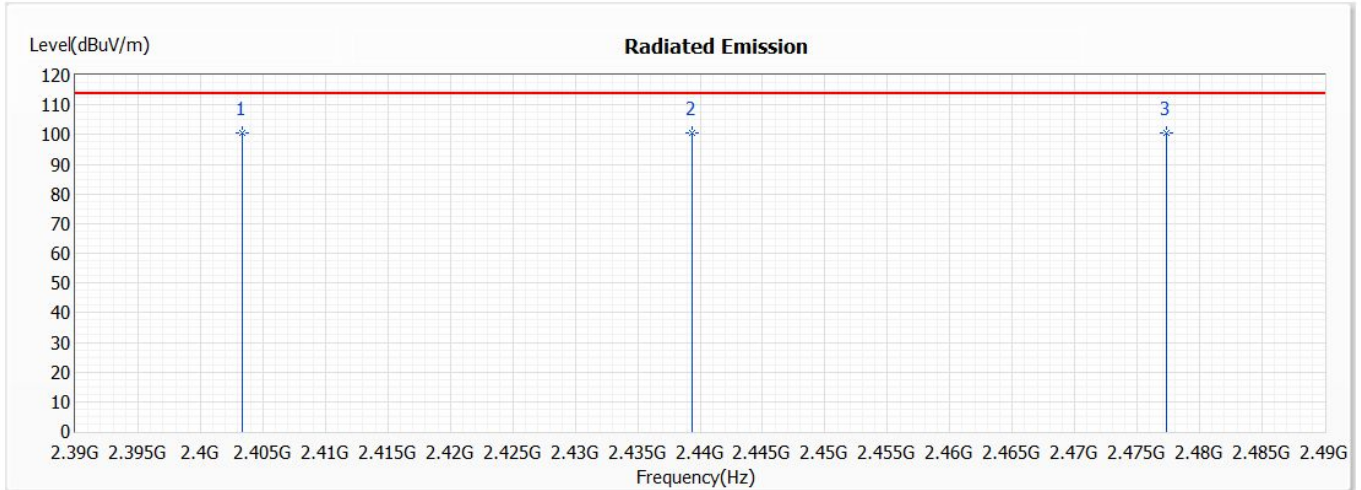
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	100.590	-40.382	60.208	-33.792	94.000
2439.350	100.600	-40.382	60.218	-33.782	94.000
2477.350	100.490	-40.382	60.108	-33.892	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

**Vertical\_Y-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2403.350	100.63	114.00	-13.37	88.15	12.48	PK
* 2	2439.350	100.72	114.00	-13.28	88.13	12.59	PK
3	2477.350	100.66	114.00	-13.34	87.96	12.70	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.

Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	100.630	-40.382	60.248	-33.752	94.000
2439.350	100.720	-40.382	60.338	-33.662	94.000
2477.350	100.660	-40.382	60.278	-33.722	94.000

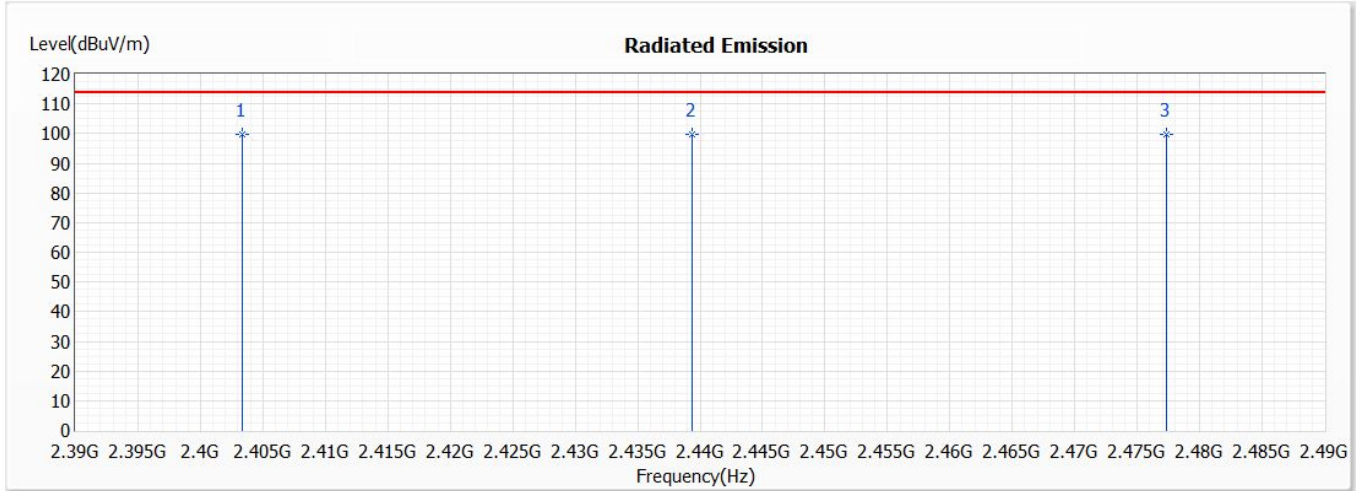
Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

**Horizontal\_Z-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2403.350	99.71	114.00	-14.29	87.23	12.48	PK
2	2439.350	99.55	114.00	-14.45	86.96	12.59	PK
* 3	2477.350	99.76	114.00	-14.24	87.06	12.70	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.

Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	99.710	-40.382	59.328	-34.672	94.000
2439.350	99.550	-40.382	59.168	-34.832	94.000
2477.350	99.760	-40.382	59.378	-34.622	94.000

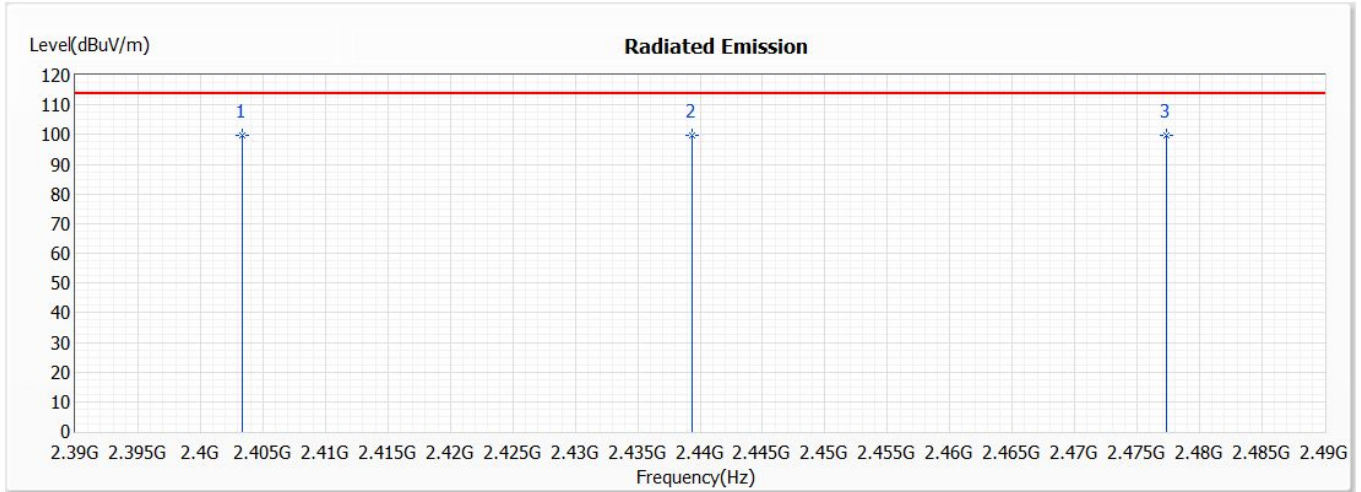
Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 1)

**Vertical\_Z-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	99.83	114.00	-14.17	87.35	12.48	PK
2	2439.350	99.62	114.00	-14.38	87.03	12.59	PK
3	2477.350	99.67	114.00	-14.33	86.97	12.70	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.

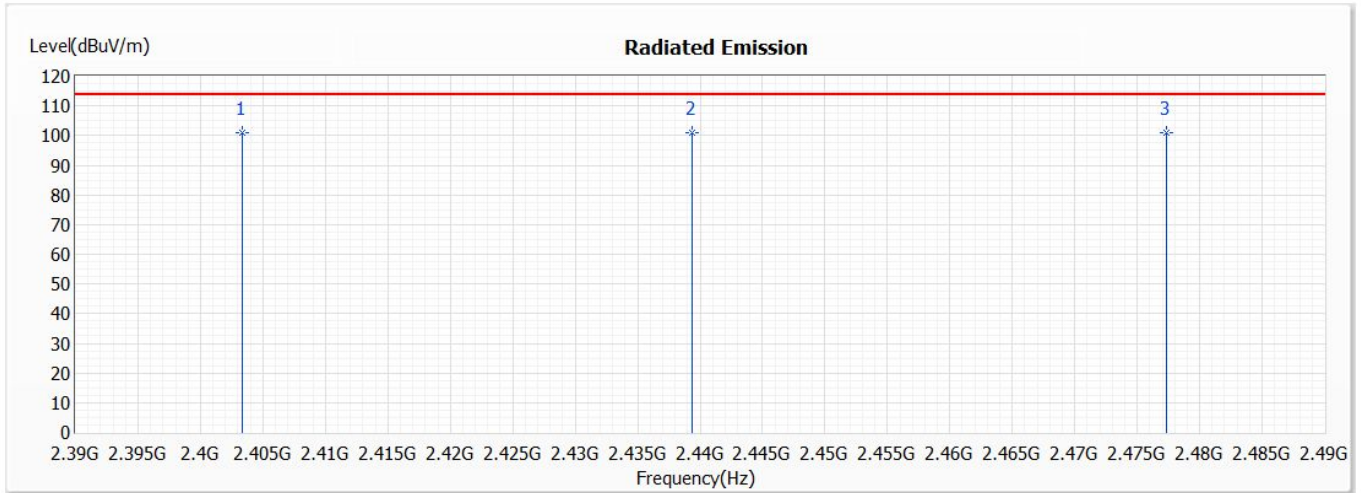
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	99.830	-40.382	59.448	-34.552	94.000
2439.350	99.620	-40.382	59.238	-34.762	94.000
2477.350	99.670	-40.382	59.288	-34.712	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Horizontal\_X-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	100.98	114.00	-13.02	88.50	12.48	PK
2	2439.350	100.88	114.00	-13.12	88.29	12.59	PK
3	2477.350	100.84	114.00	-13.16	88.14	12.70	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.

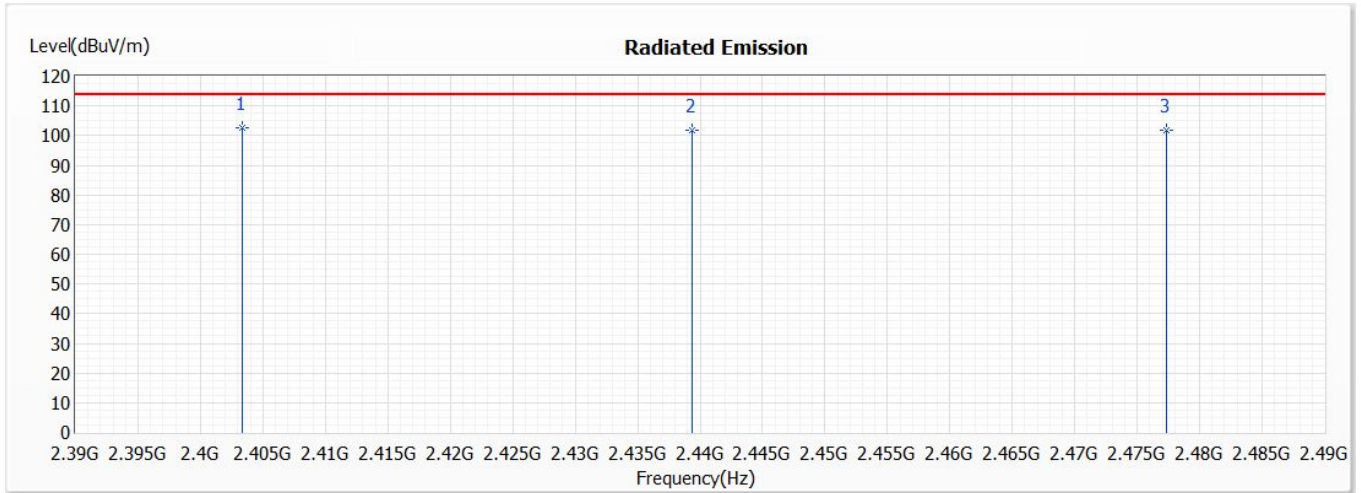
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	100.980	-40.382	60.598	-33.402	94.000
2439.350	100.880	-40.382	60.498	-33.502	94.000
2477.350	100.840	-40.382	60.458	-33.542	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Vertical\_X-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	102.47	114.00	-11.53	89.99	12.48	PK
2	2439.350	101.88	114.00	-12.12	89.29	12.59	PK
3	2477.350	101.93	114.00	-12.07	89.23	12.70	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.

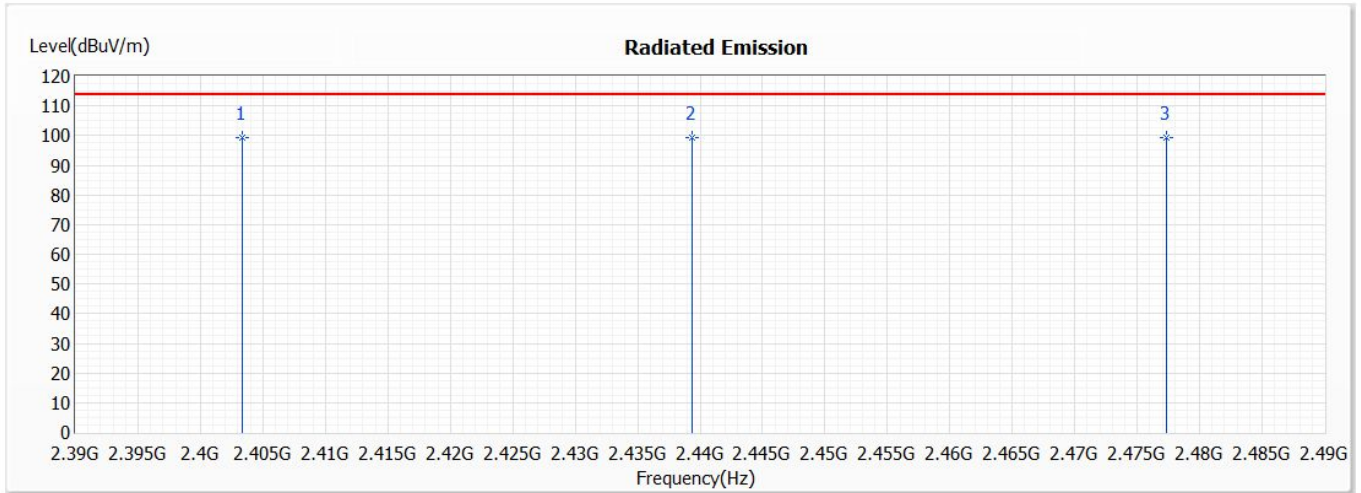
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	102.470	-40.382	62.088	-31.912	94.000
2439.350	101.880	-40.382	61.498	-32.502	94.000
2477.350	101.930	-40.382	61.548	-32.452	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Horizontal\_Y-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	99.44	114.00	-14.56	86.96	12.48	PK
2	2439.350	99.27	114.00	-14.73	86.68	12.59	PK
3	2477.350	99.23	114.00	-14.77	86.53	12.70	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.

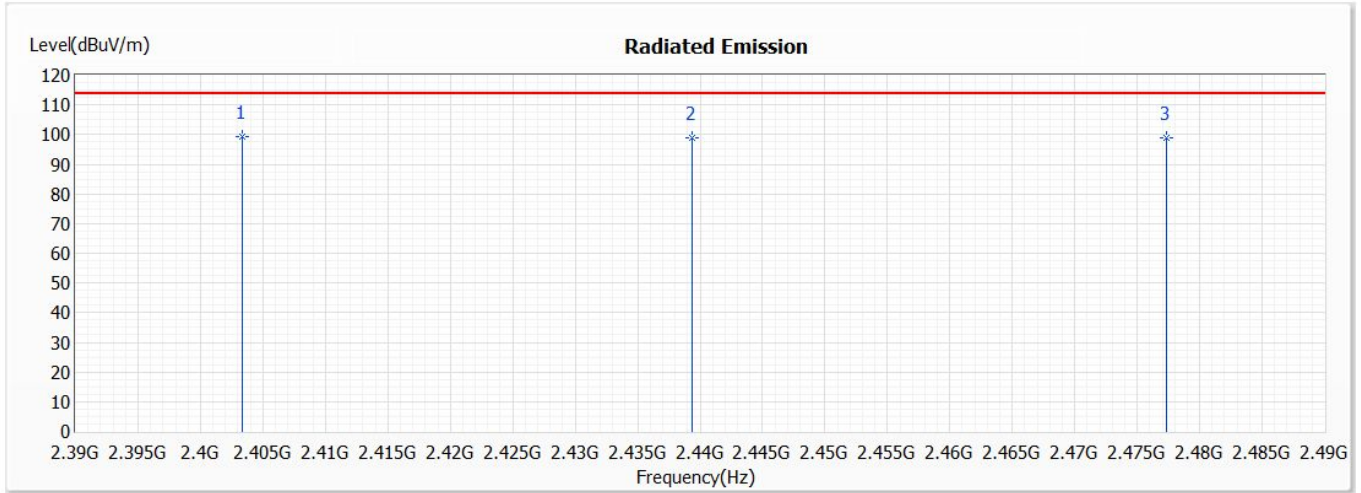
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	99.440	-40.382	59.058	-34.942	94.000
2439.350	99.270	-40.382	58.888	-35.112	94.000
2477.350	99.230	-40.382	58.848	-35.152	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Vertical\_Y-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	99.22	114.00	-14.78	86.74	12.48	PK
2	2439.350	98.89	114.00	-15.11	86.30	12.59	PK
3	2477.350	98.92	114.00	-15.08	86.22	12.70	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.

Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	99.220	-40.382	58.838	-35.162	94.000
2439.350	98.890	-40.382	58.508	-35.492	94.000
2477.350	98.920	-40.382	58.538	-35.462	94.000

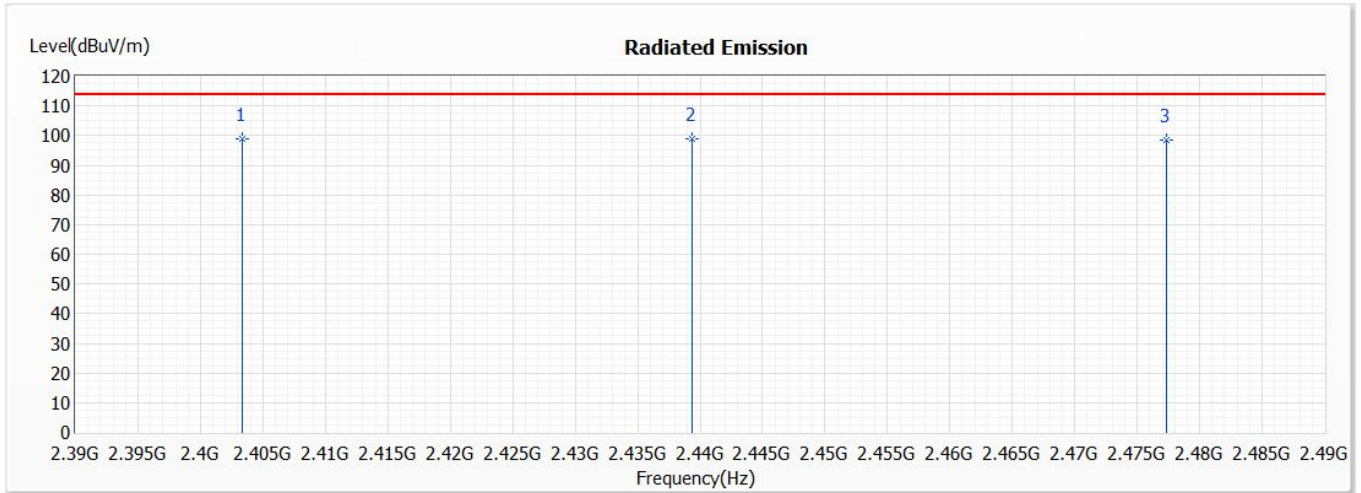
Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Horizontal\_Z-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	98.87	114.00	-15.13	86.39	12.48	PK
2	2439.350	98.73	114.00	-15.27	86.14	12.59	PK
3	2477.350	98.67	114.00	-15.33	85.97	12.70	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.

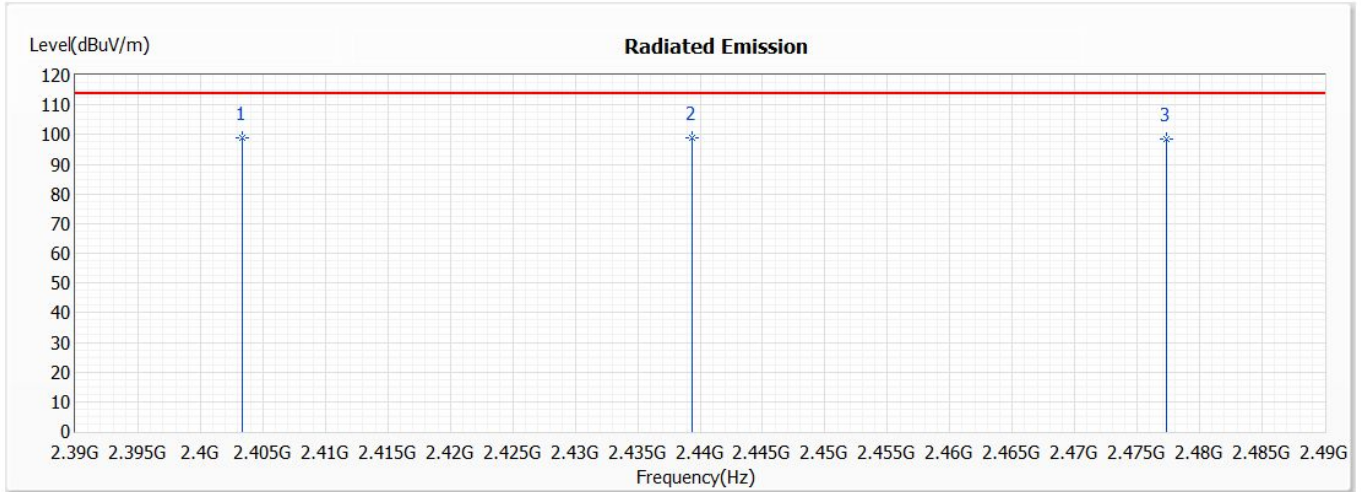
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	98.870	-40.382	58.488	-35.512	94.000
2439.350	98.730	-40.382	58.348	-35.652	94.000
2477.350	98.670	-40.382	58.288	-35.712	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Fundamental Radiated Emission  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (Antenna 2)

**Vertical\_Z-Axis**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	2403.350	98.79	114.00	-15.21	86.31	12.48	PK
2	2439.350	98.76	114.00	-15.24	86.17	12.59	PK
3	2477.350	98.66	114.00	-15.34	85.96	12.70	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.

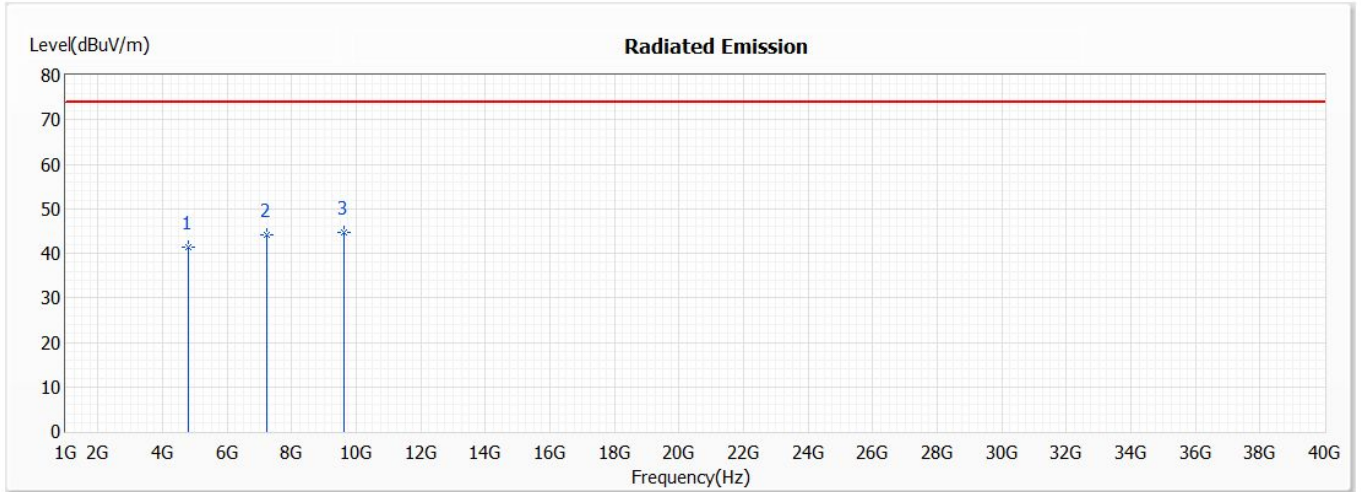
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)
2403.350	98.790	-40.382	58.408	-35.592	94.000
2439.350	98.760	-40.382	58.378	-35.622	94.000
2477.350	98.660	-40.382	58.278	-35.722	94.000

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 1)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4806.700	41.35	74.00	-32.65	42.92	-1.57	PK
2	7210.050	44.01	74.00	-29.99	41.09	2.92	PK
* 3	9613.400	44.58	74.00	-29.42	39.64	4.94	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
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**Average Detector:**

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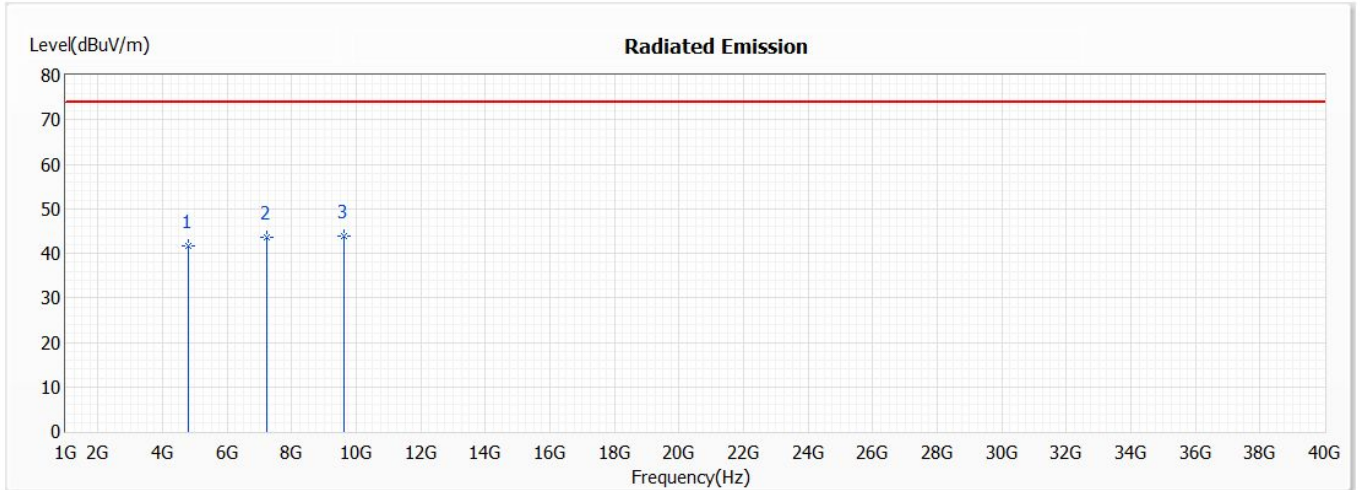
Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 1)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4806.700	41.76	74.00	-32.24	43.33	-1.57	PK
2	7210.050	43.52	74.00	-30.48	40.60	2.92	PK
* 3	9613.400	43.83	74.00	-30.17	38.89	4.94	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
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**Average Detector:**

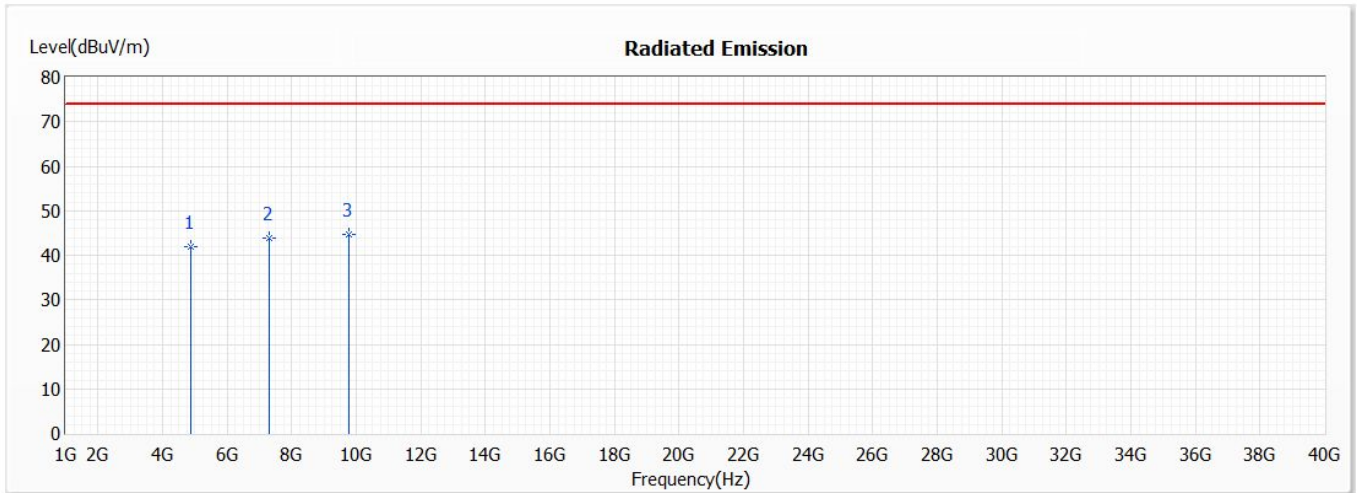
--	--	--	--	--	74.000	54.000
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Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4878.700	41.81	74.00	-32.19	43.31	-1.50	PK
2	7318.050	43.94	74.00	-30.06	41.01	2.93	PK
* 3	9757.400	44.62	74.00	-29.38	39.37	5.25	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
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**Average Detector:**

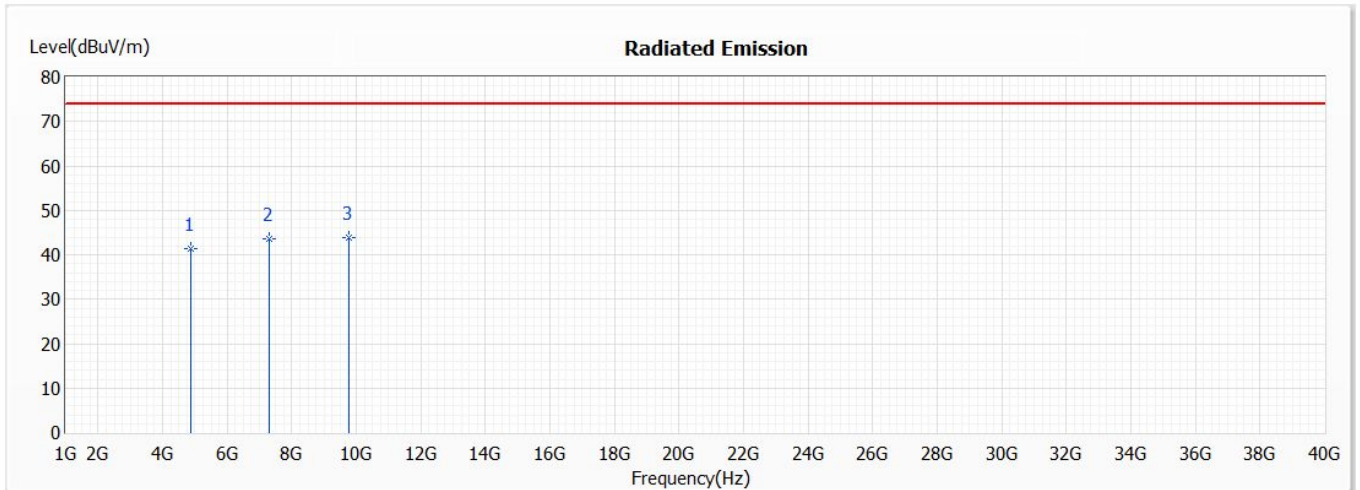
--	--	--	--	--	74.000	54.000
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Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4878.700	41.30	74.00	-32.70	42.80	-1.50	PK
2	7318.050	43.49	74.00	-30.51	40.56	2.93	PK
* 3	9757.400	43.89	74.00	-30.11	38.64	5.25	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
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**Average Detector:**

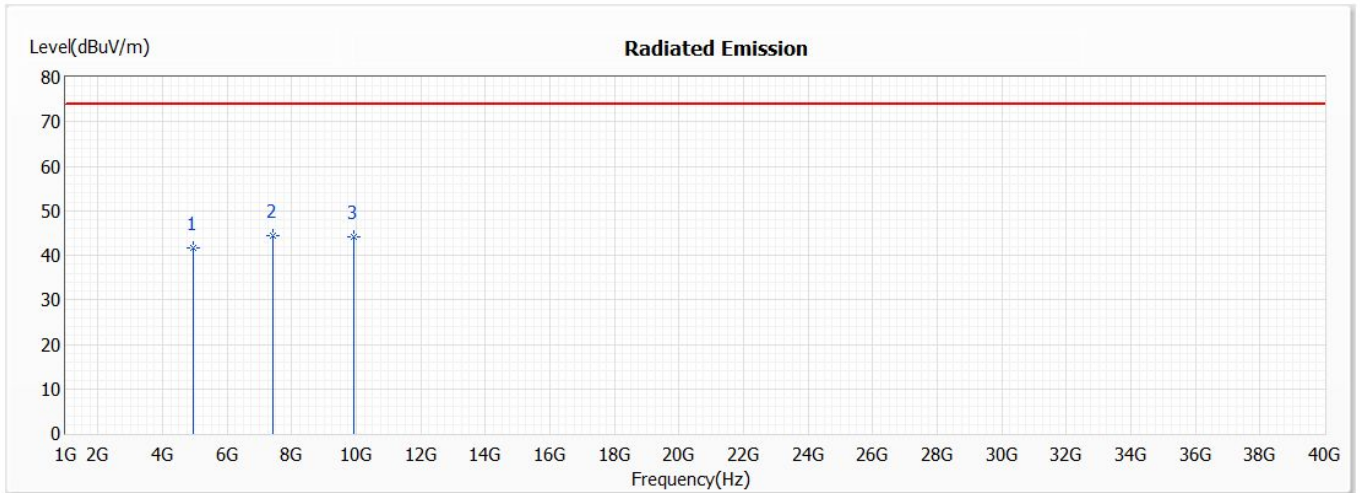
--	--	--	--	--	74.000	54.000
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**Note:**

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 1)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4954.700	41.58	74.00	-32.42	42.72	-1.14	PK
* 2	7432.050	44.28	74.00	-29.72	41.22	3.06	PK
3	9909.400	44.07	74.00	-29.93	38.65	5.42	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
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**Average Detector:**

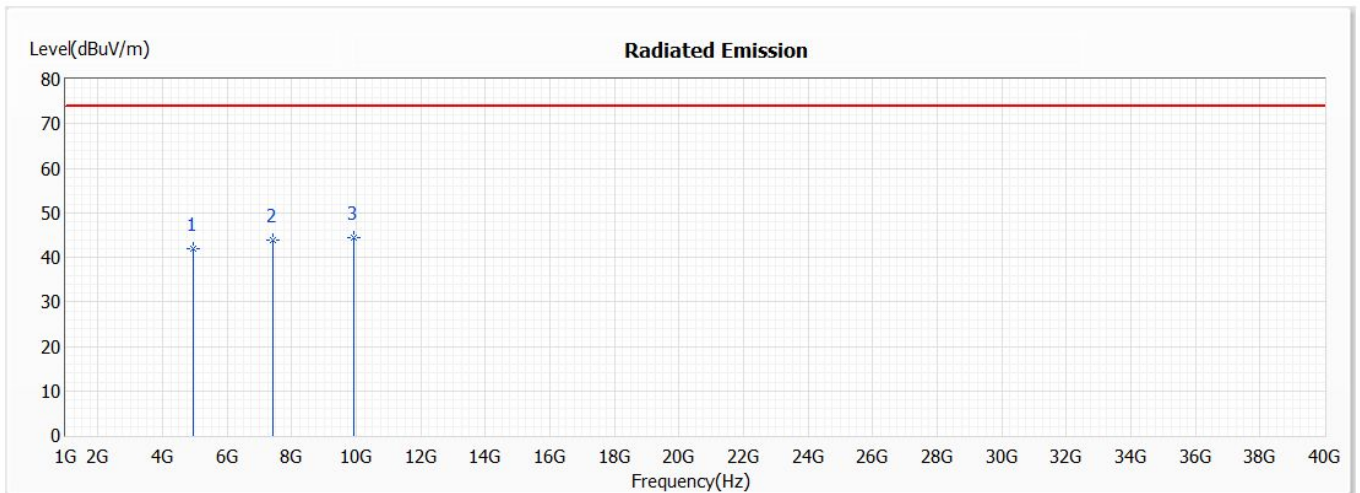
--	--	--	--	--	74.000	54.000
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Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 1)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4954.700	42.02	74.00	-31.98	43.16	-1.14	PK
2	7432.050	43.74	74.00	-30.26	40.68	3.06	PK
* 3	9909.400	44.50	74.00	-29.50	39.08	5.42	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.

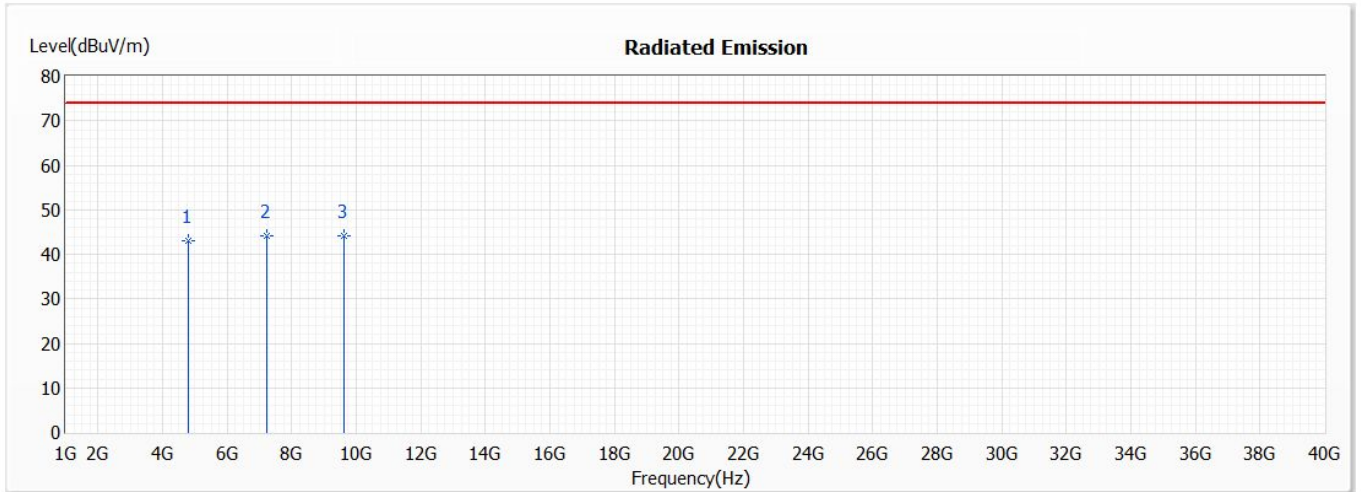
Frequency MHz	Peak Measurement dBμV/m	Duty Cycle Factor dB	Average Measurement dBμV/m	Margin dB	Peak Limit dBμV/m	Average Limit dBμV/m
<b>Average Detector:</b>						
--	--	--	--	--	74.000	54.000

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4806.700	43.01	74.00	-30.99	44.58	-1.57	PK
2	7210.050	44.07	74.00	-29.93	41.15	2.92	PK
* 3	9613.400	44.14	74.00	-29.86	39.20	4.94	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
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**Average Detector:**

--	--	--	--	--	74.000	54.000
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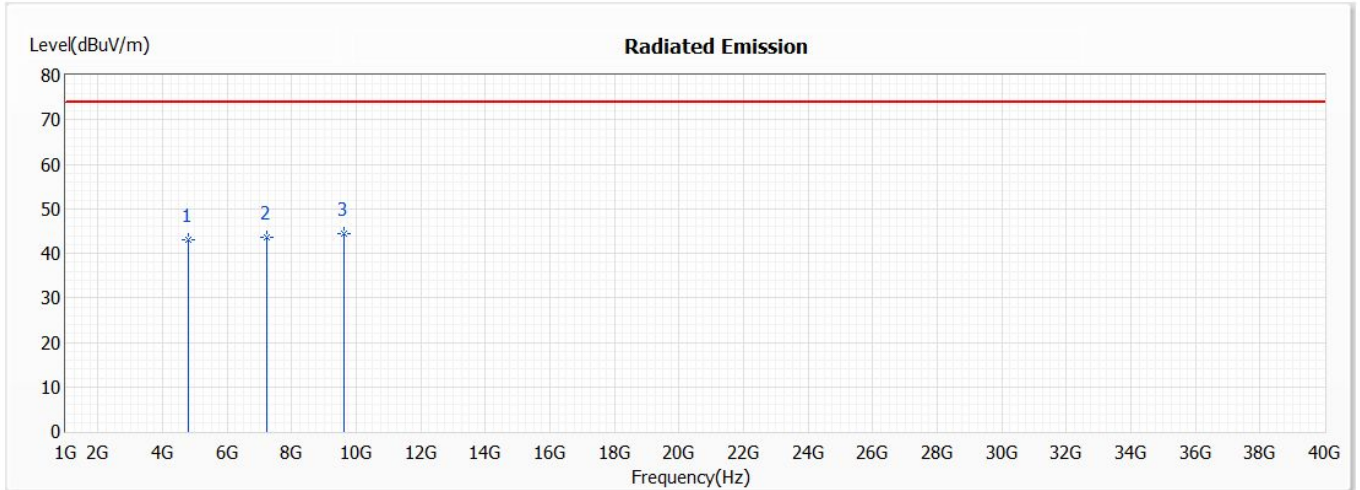
Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4806.700	42.94	74.00	-31.06	44.51	-1.57	PK
2	7210.050	43.57	74.00	-30.43	40.65	2.92	PK
* 3	9613.400	44.34	74.00	-29.66	39.40	4.94	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
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**Average Detector:**

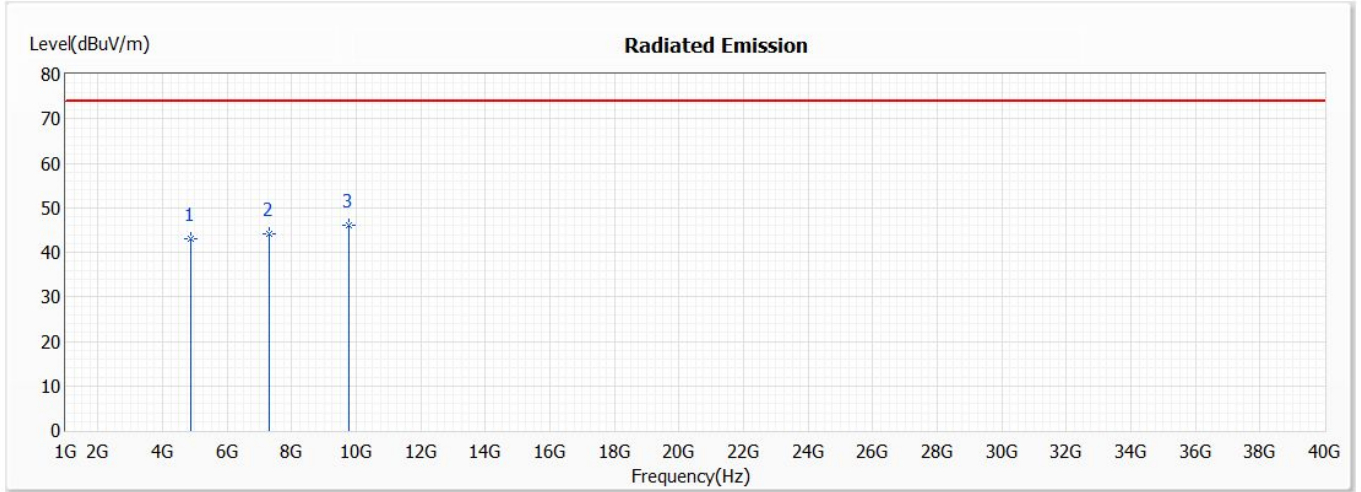
--	--	--	--	--	74.000	54.000
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Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4878.700	43.06	74.00	-30.94	44.56	-1.50	PK
2	7318.050	44.16	74.00	-29.84	41.23	2.93	PK
* 3	9757.400	46.07	74.00	-27.93	40.82	5.25	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
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**Average Detector:**

--	--	--	--	--	74.000	54.000
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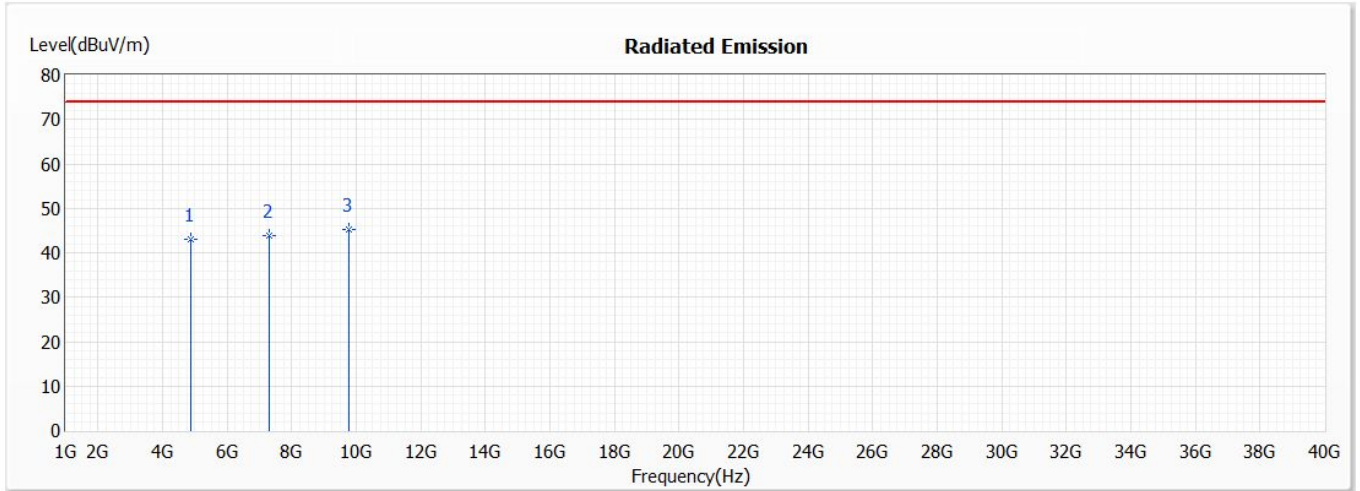
Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4878.700	43.06	74.00	-30.94	44.56	-1.50	PK
2	7318.050	43.83	74.00	-30.17	40.90	2.93	PK
* 3	9757.400	45.30	74.00	-28.70	40.05	5.25	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
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**Average Detector:**

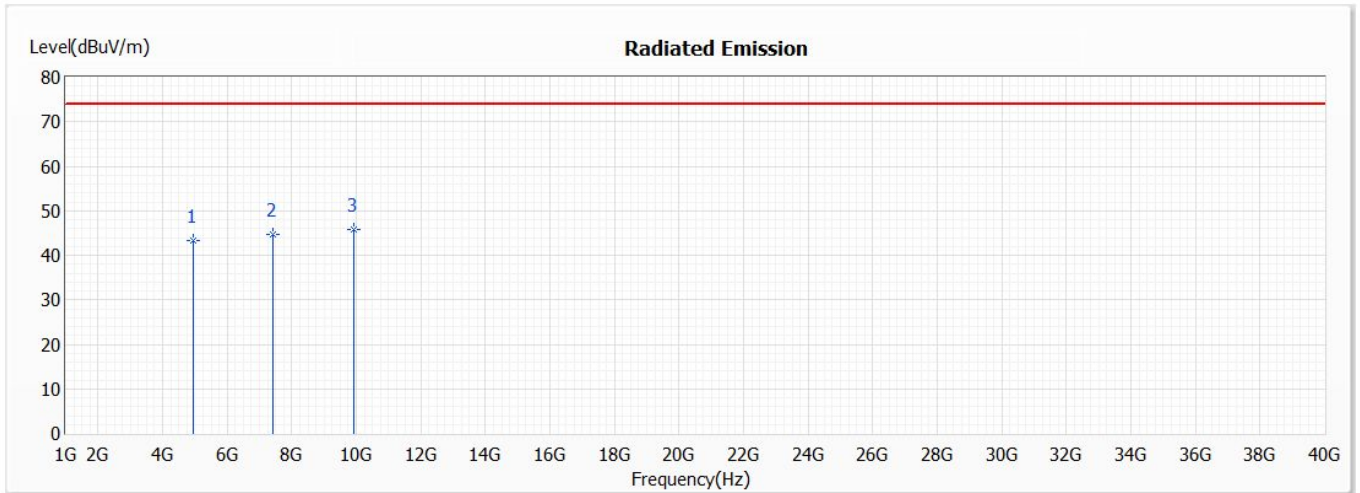
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

**Note:**

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4954.700	43.22	74.00	-30.78	44.36	-1.14	PK
2	7432.050	44.82	74.00	-29.18	41.76	3.06	PK
* 3	9909.400	45.79	74.00	-28.21	40.37	5.42	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
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**Average Detector:**

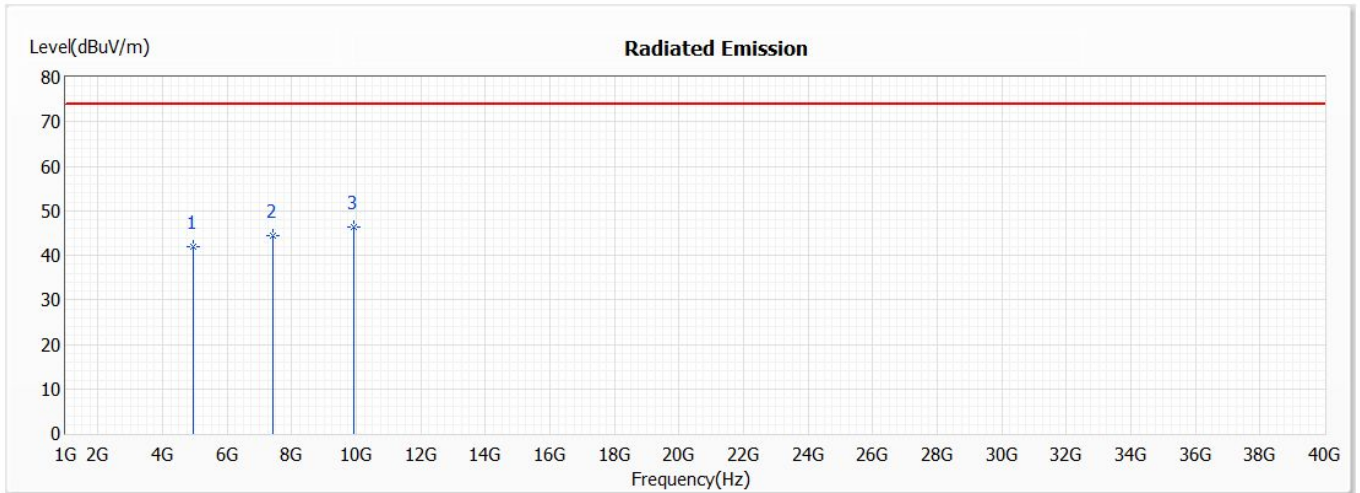
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

- AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
- The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Harmonic Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	4954.700	42.03	74.00	-31.97	43.17	-1.14	PK
2	7432.050	44.37	74.00	-29.63	41.31	3.06	PK
* 3	9909.400	46.35	74.00	-27.65	40.93	5.42	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
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**Average Detector:**

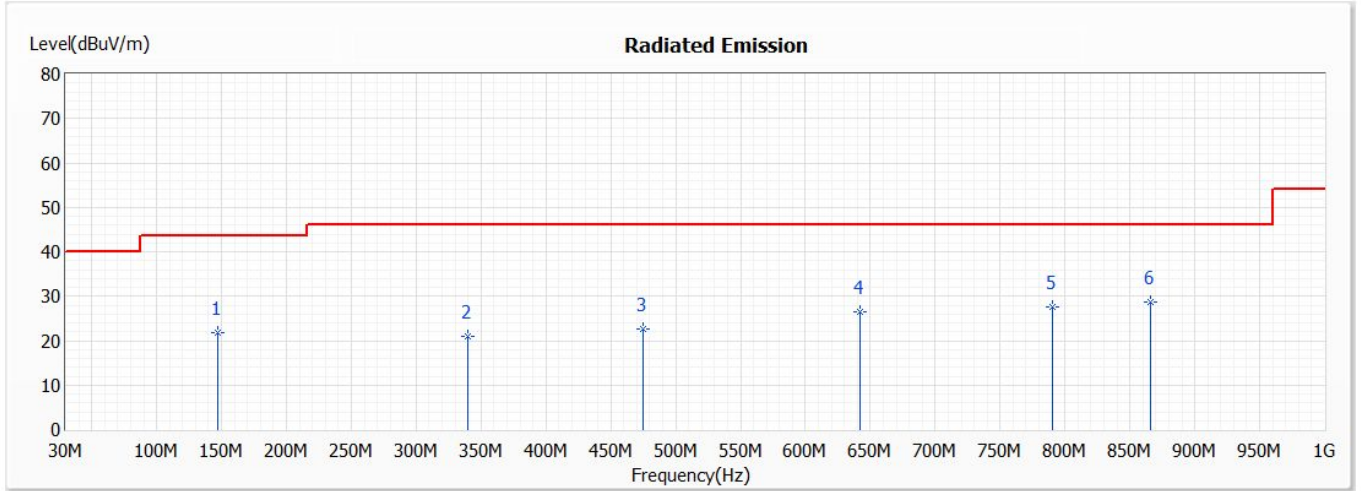
--	--	--	--	--	74.000	54.000
----	----	----	----	----	--------	--------

Note:

1. AVG Measurement=Peak Measurement + Duty Cycle Correct Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : General Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

**Horizontal**



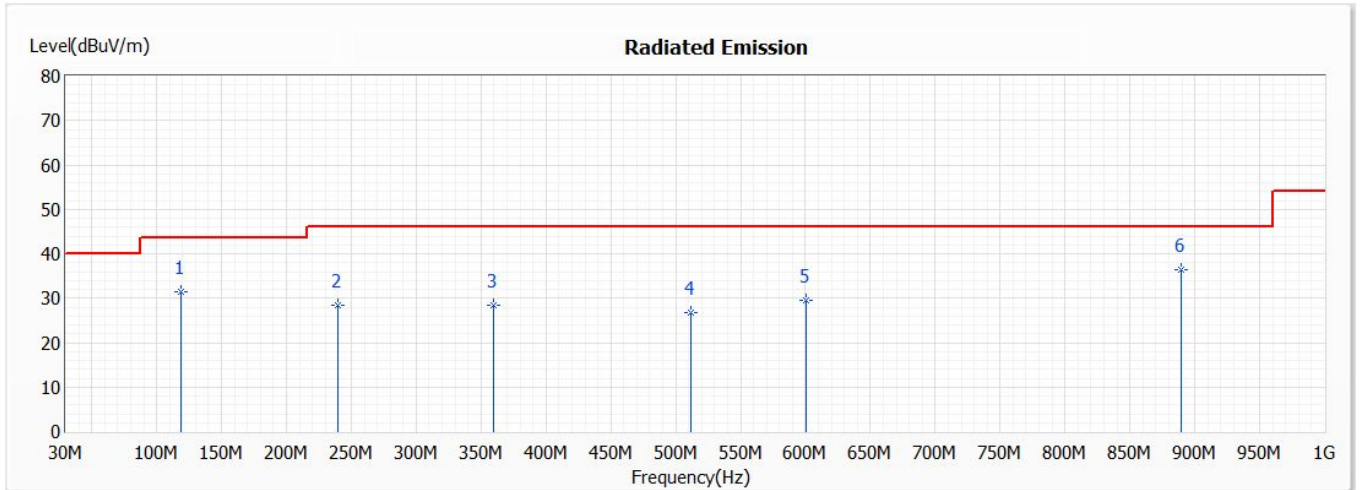
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	147.370	21.90	43.50	-21.60	32.36	-10.46	QP
2	339.430	20.87	46.00	-25.13	29.56	-8.69	QP
3	475.230	22.57	46.00	-23.43	28.17	-5.60	QP
4	642.070	26.47	46.00	-19.53	28.89	-2.42	QP
5	790.480	27.47	46.00	-18.53	27.61	-0.14	QP
* 6	866.140	28.61	46.00	-17.39	28.14	0.47	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 : TUF GAMING H1 WIRELESS  
 Test Item : General Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 1)

**Vertical**



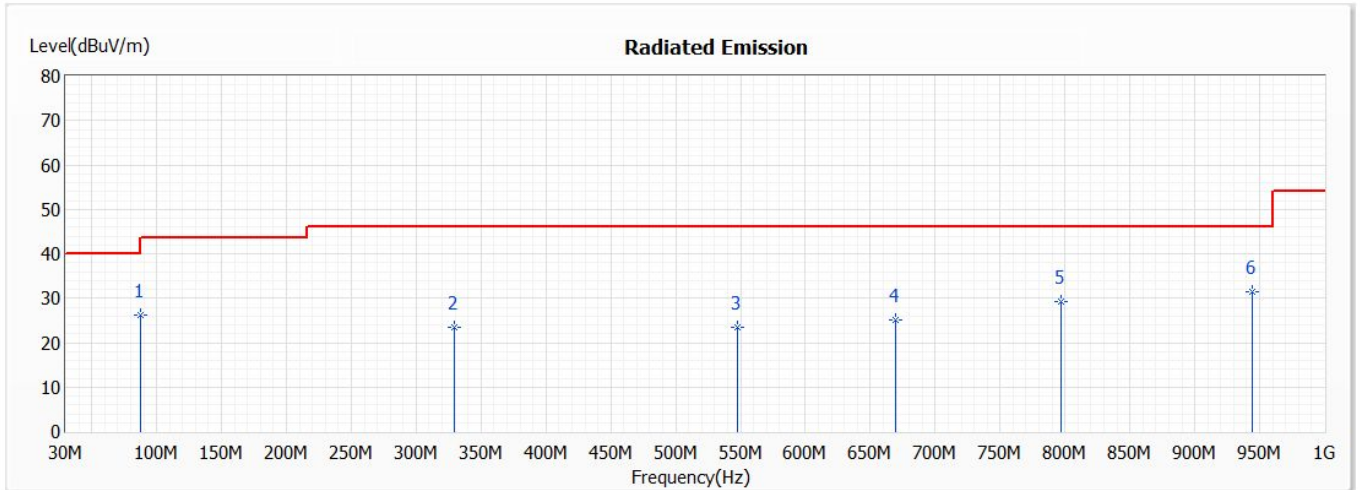
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	119.240	31.57	43.50	-11.93	44.65	-13.08	QP
2	239.520	28.44	46.00	-17.56	39.80	-11.36	QP
3	359.800	28.40	46.00	-17.60	36.62	-8.22	QP
4	512.090	26.79	46.00	-19.21	31.68	-4.89	QP
5	600.360	29.52	46.00	-16.48	32.37	-2.85	QP
* 6	889.420	36.54	46.00	-9.46	35.60	0.94	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 : TUF GAMING H1 WIRELESS  
 Test Item : General Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	87.230	26.28	40.00	-13.72	43.13	-16.85	QP
2	329.730	23.35	46.00	-22.65	32.28	-8.93	QP
3	547.980	23.47	46.00	-22.53	27.61	-4.14	QP
4	669.230	25.24	46.00	-20.76	27.41	-2.17	QP
5	797.270	29.27	46.00	-16.73	29.29	-0.02	QP
6	944.710	31.32	46.00	-14.68	29.47	1.85	QP

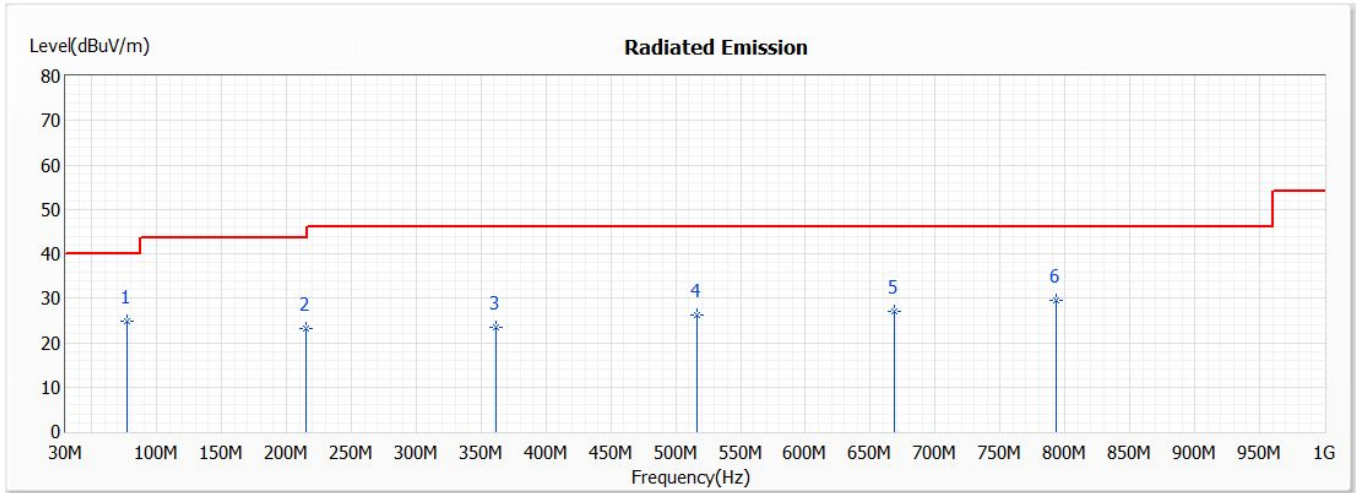
Note:

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 : TUF GAMING H1 WIRELESS  
 Test Item : General Radiated Emission Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2439.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
* 1	77.530	24.84	40.00	-15.16	39.85	-15.01	QP
2	215.270	23.16	43.50	-20.34	36.03	-12.87	QP
3	361.740	23.38	46.00	-22.62	31.56	-8.18	QP
4	515.970	26.07	46.00	-19.93	30.81	-4.74	QP
5	668.260	26.97	46.00	-19.03	29.16	-2.19	QP
6	793.390	29.55	46.00	-16.45	29.62	-0.07	QP

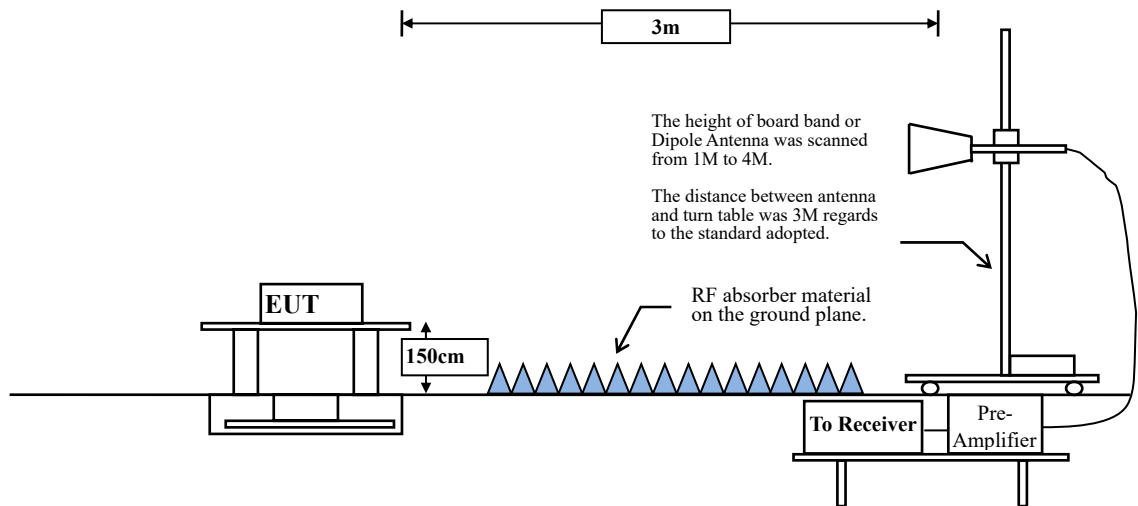
Note:

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.

#### 4. Band Edge

##### 4.1. Test Setup

###### RF Radiated Measurement:



##### 4.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB 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(a) 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: E field strength (dBμV /m) = 20 log E field strength (uV/m)



### 4.3. 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.

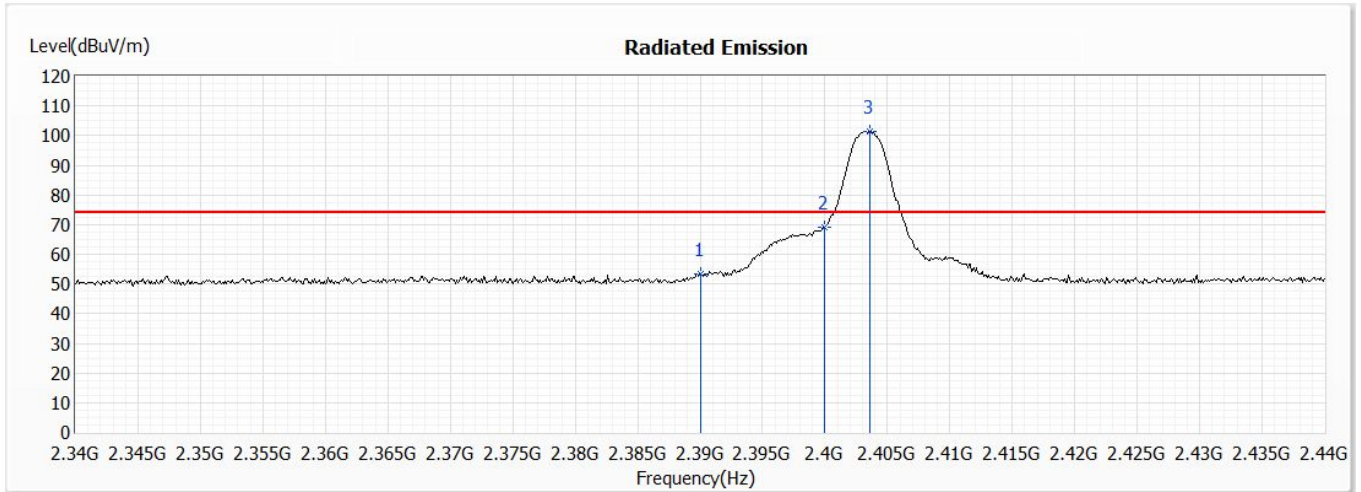
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2013 on radiated measurement.

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

#### 4.4. Test Result of Band Edge

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 1)

##### Horizontal



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	53.29	74.00	-20.71	40.91	12.38	PK
2	2400.000	68.94	74.00	-5.06	56.48	12.46	PK
! 3	2403.600	101.42	--	--	88.94	12.48	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.

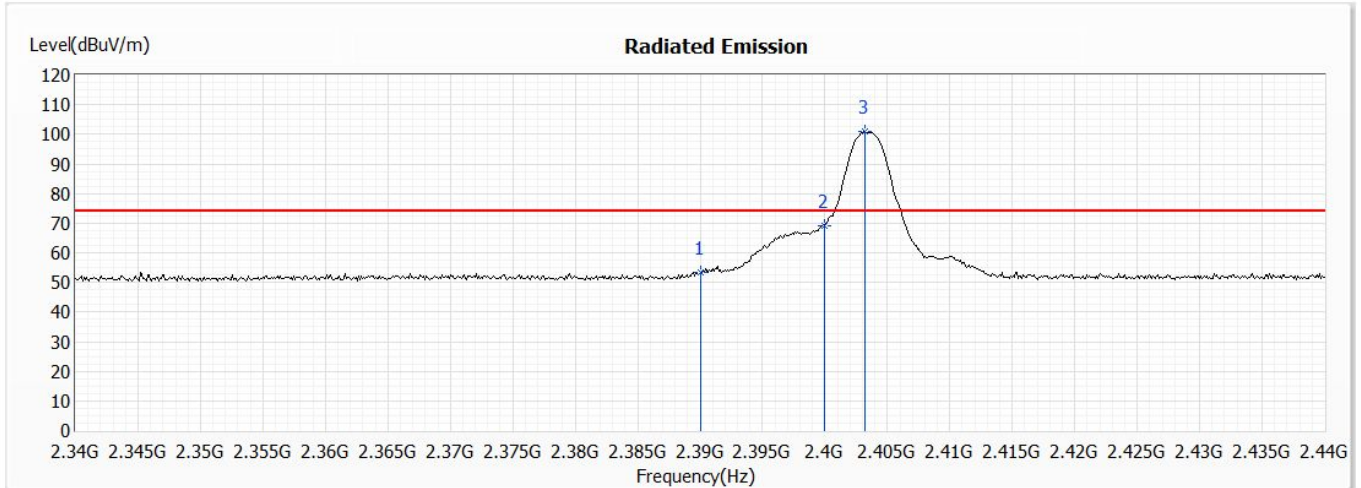
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2390.000	53.290	-40.382	12.908	-41.092	54.000	Pass
2400.000	68.940	-40.382	28.558	-25.442	54.000	Pass
2403.600	101.420	-40.382	61.038	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 1)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	53.53	74.00	-20.47	41.15	12.38	PK
2	2400.000	69.09	74.00	-4.91	56.63	12.46	PK
! 3	2403.200	100.91	--	--	88.43	12.48	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.

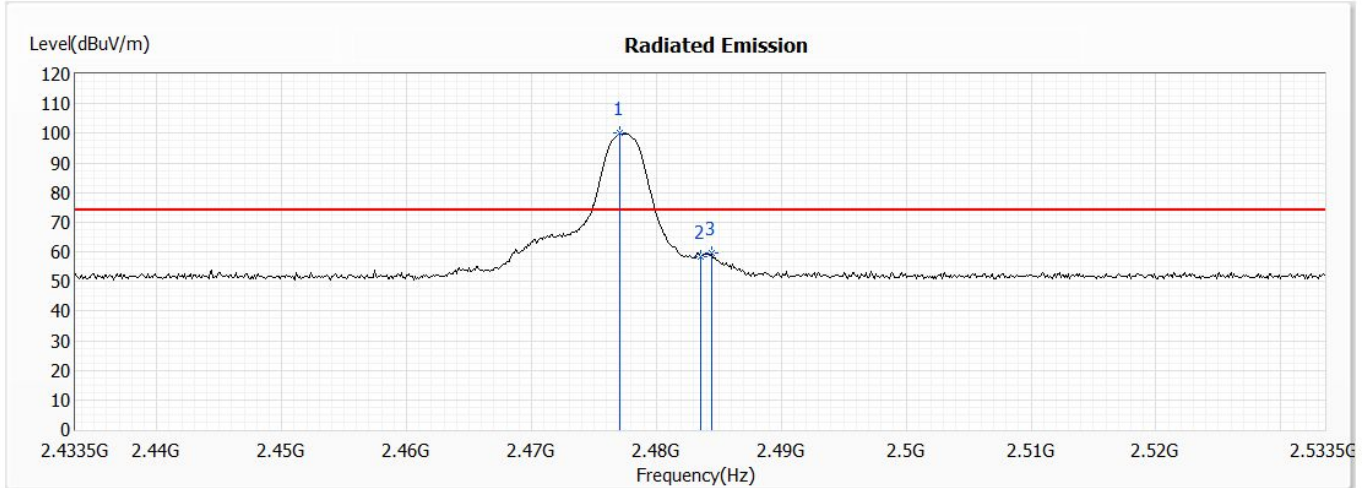
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2390.000	53.530	-40.382	13.148	-40.852	54.000	Pass
2400.000	69.090	-40.382	28.708	-25.292	54.000	Pass
2403.200	100.910	-40.382	60.528	--	--	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 1)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2477.100	99.94	--	--	87.24	12.70	PK
2	2483.500	58.48	74.00	-15.52	45.75	12.73	PK
3	2484.400	59.52	74.00	-14.48	46.79	12.73	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.

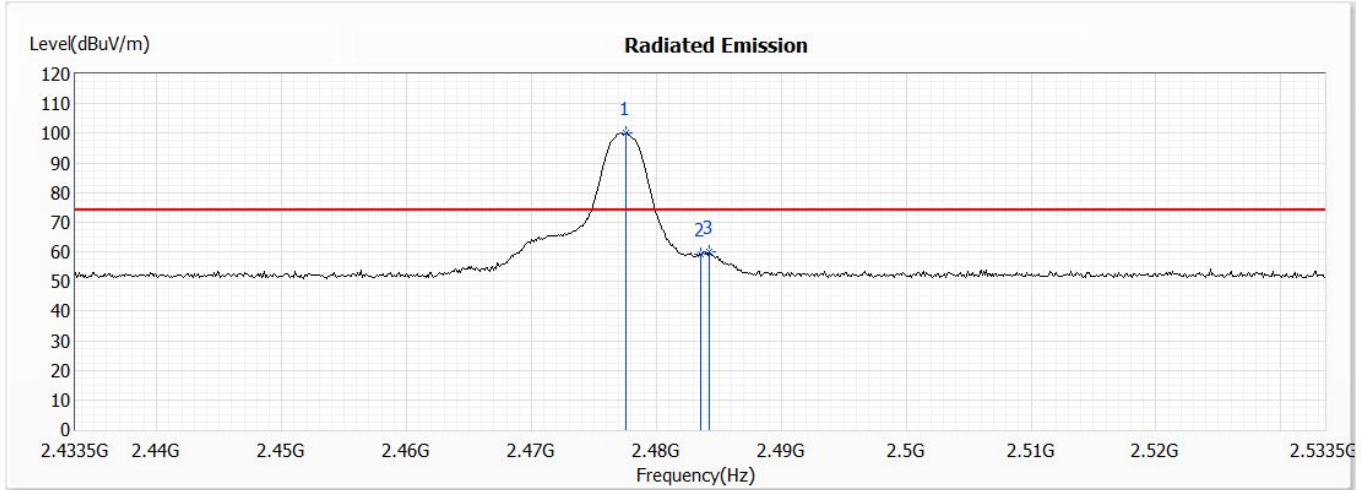
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2477.100	99.940	-40.382	59.558	--	--	Pass
2483.500	58.480	-40.382	18.098	-35.902	54.000	Pass
2484.400	59.520	-40.382	19.138	-34.862	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 1)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2477.600	100.03	--	--	87.32	12.71	PK
2	2483.500	59.36	74.00	-14.64	46.63	12.73	PK
3	2484.200	60.01	74.00	-13.99	47.28	12.73	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.

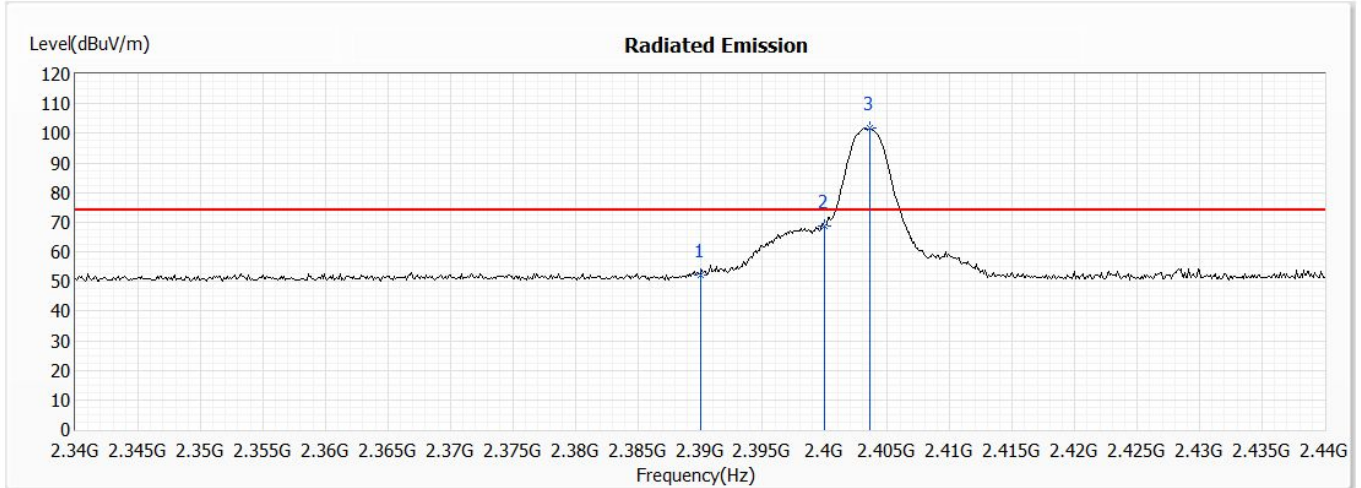
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2477.600	100.030	-40.382	59.648	--	--	Pass
2483.500	59.360	-40.382	18.978	-35.022	54.000	Pass
2484.200	60.010	-40.382	19.628	-34.372	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	52.34	74.00	-21.66	39.96	12.38	PK
2	2400.000	68.82	74.00	-5.18	56.36	12.46	PK
! 3	2403.600	101.65	--	--	89.17	12.48	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.

Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2390.000	52.340	-40.382	11.958	-42.042	54.000	Pass
2400.000	68.820	-40.382	28.438	-25.562	54.000	Pass
2403.600	101.650	-40.382	61.268	--	--	Pass

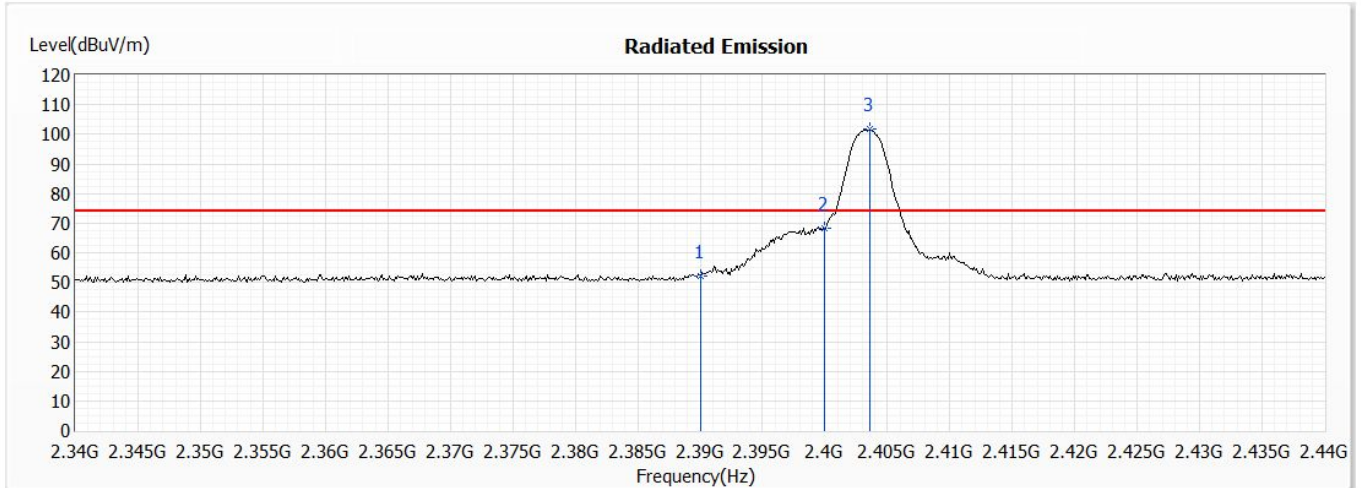
Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2403.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
1	2390.000	52.32	74.00	-21.68	39.94	12.38	PK
2	2400.000	68.25	74.00	-5.75	55.79	12.46	PK
! 3	2403.600	101.59	--	--	89.11	12.48	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.

Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2390.000	52.320	-40.382	11.938	-42.062	54.000	Pass
2400.000	68.250	-40.382	27.868	-26.132	54.000	Pass
2403.600	101.590	-40.382	61.208	--	--	Pass

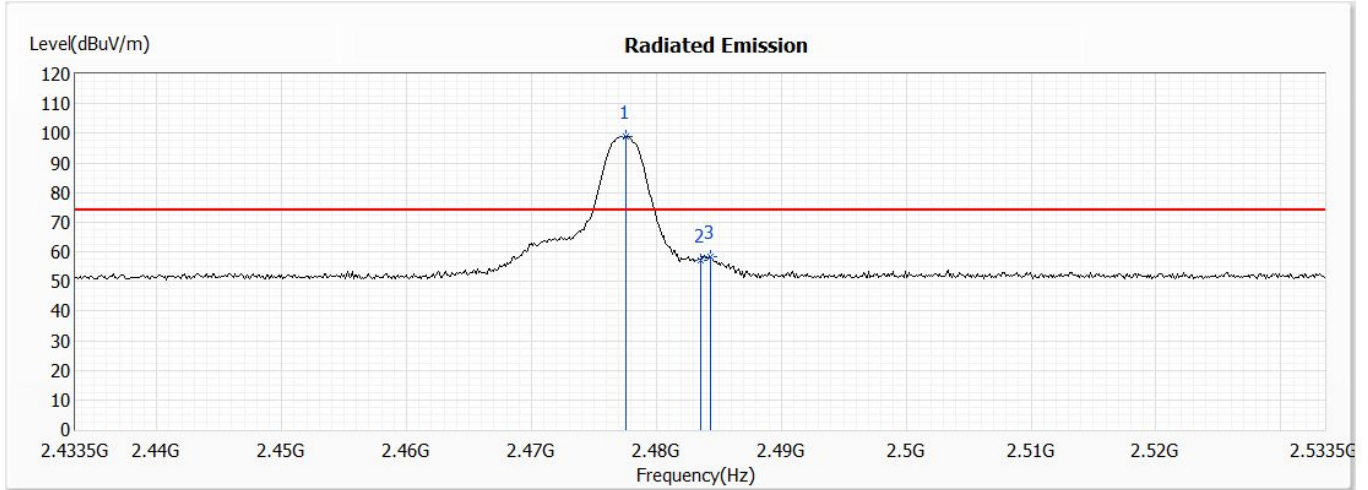
Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.



Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 2)

**Horizontal**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2477.600	98.91	--	--	86.20	12.71	PK
2	2483.500	57.29	74.00	-16.71	44.56	12.73	PK
3	2484.300	58.34	74.00	-15.66	45.61	12.73	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.

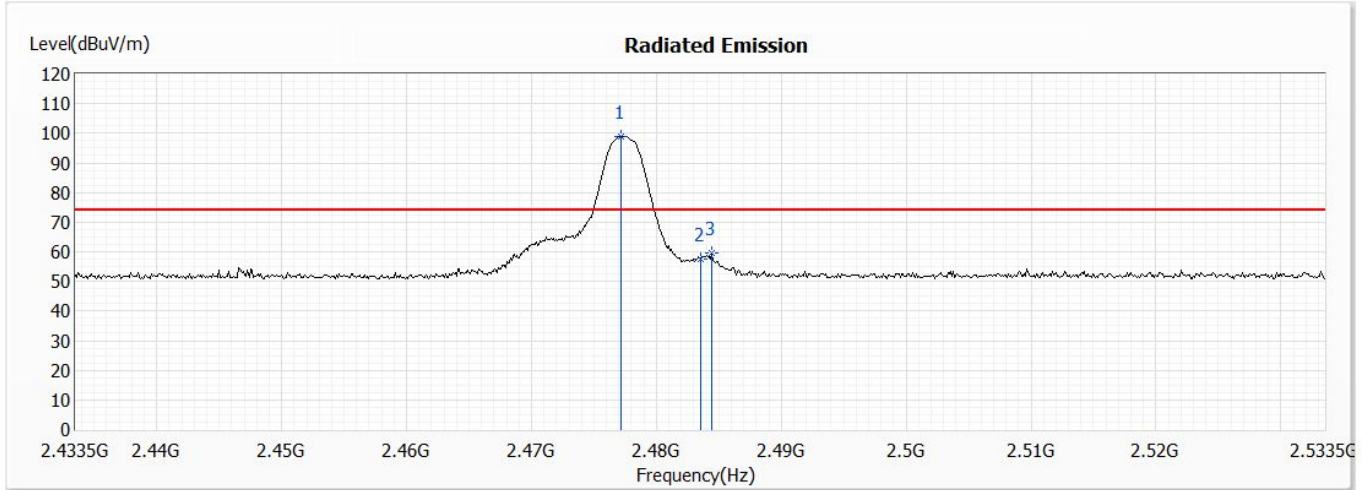
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2477.600	98.910	-40.382	58.528	--	--	Pass
2483.500	57.290	-40.382	16.908	-37.092	54.000	Pass
2484.300	58.340	-40.382	17.958	-36.042	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

Product : TUF GAMING H1 WIRELESS  
 Test Item : Band Edge Data  
 Test Date : 2021/06/30  
 Test Mode : Mode 1: Transmit (2477.35MHz) (Antenna 2)

**Vertical**



No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Reading Level (dBuV)	Correct Factor (dB)	Detector Type
! 1	2477.200	98.89	--	--	86.19	12.70	PK
2	2483.500	57.37	74.00	-16.63	44.64	12.73	PK
3	2484.400	59.42	74.00	-14.58	46.69	12.73	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.

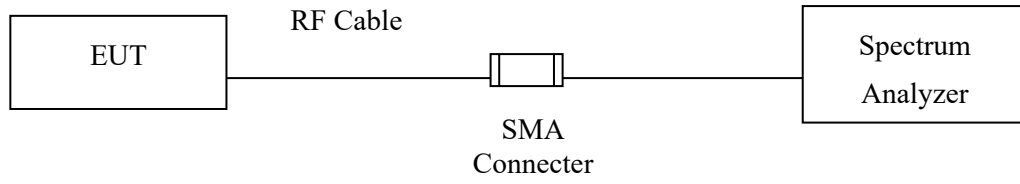
Frequency (MHz)	Peak Measurement (dBμV/m)	Duty Cycle Factor (dB)	Average Measurement (dBμV/m)	Margin (dB)	Average Limit (dBμV/m)	Result
2477.200	98.890	-40.382	58.508	--	--	Pass
2483.500	57.370	-40.382	16.988	-37.012	54.000	Pass
2484.400	59.420	-40.382	19.038	-34.962	54.000	Pass

Note:

1. Average Measurement=Peak Measurement + Duty Cycle Factor
2. The Duty Cycle is refer to section 5.

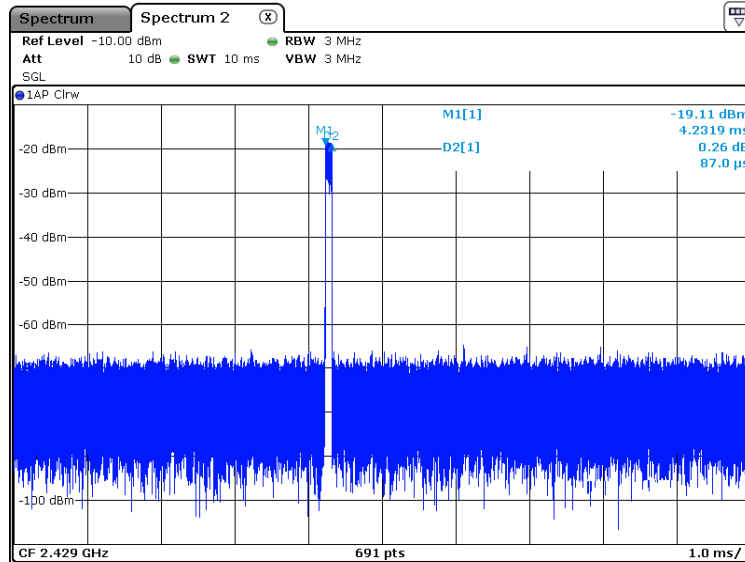
## 5. Duty Cycle

### 5.1. Test Setup

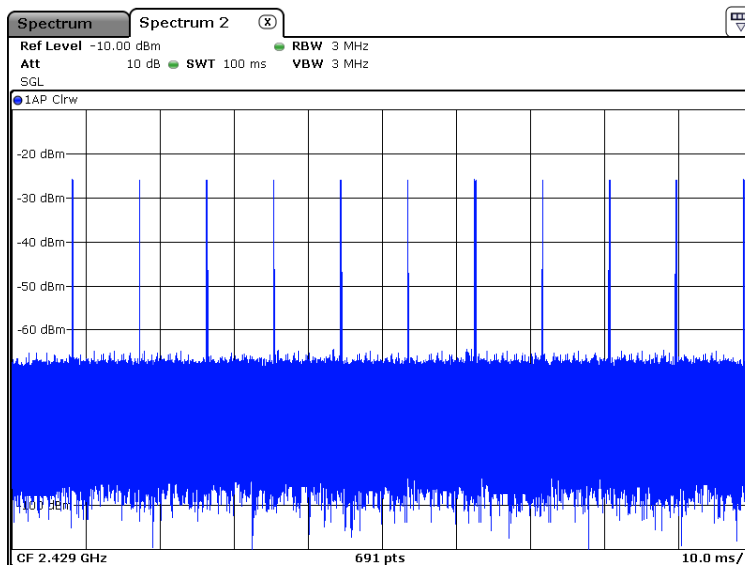


## 5.2. Test Result of Duty Cycle

Product : TUF GAMING H1 WIRELESS  
 Test Item : Duty Cycle Data  
 Test Mode : Mode 2: Normal mode



Date: 17.SEP.2021 07:44:30



Date: 17.SEP.2021 07:49:28

Time on of 100ms= 87us\*11= 0.957ms

Duty Cycle=0.957ms / 100ms= 0.00957

Duty Cycle correction factor= 20 LOG 0.00957= -40.382dB

<b>Duty Cycle correction factor</b>	<b>-40.382 dB</b>
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## **6. EMI Reduction Method During Compliance Testing**

No modification was made during testing.