

# RF Exposure Evaluation 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  
Date of Declaration : Jul. 29, 2021  
Report No. : 2161093R-E3082100014  
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.

Issued Date: Jul. 29, 2021

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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	
Trade Name	ASUS	
Applicable Standard	KDB 447498 D01 v06	<input type="checkbox"/> Minimum test separation distance $\geq 20$ cm <input checked="" type="checkbox"/> For low power devices
Test Result	Complied	

Documented By

:

*Genie Chang*

( Senior Project Specialist / Genie Chang )

Tested By

:

*wenLee*

( Supervisor / Wen Lee )

Approved By

:

*Tim Sung*

( Manager / Tim Sung )

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## **Revision History**

Report No.	Version	Description	Issued Date
2161093R-E3082100014	V1.0	Initial issue of report.	2021-07-29

## 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	2405.35-2477.35MHz
Channel Number	37CH
Type of Modulation	Pi/4 DQPSK
Channel Control	Auto
Antenna Type	PCB Antenna
Antenna Gain	Refer to the table "Antenna List"

#### 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

## 2. RF Exposure Evaluation

### 2.1. Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

### 2.2. Measurement Result:

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 ( $\text{Power(mW)}/\text{separation (mm)} \cdot \sqrt{f(\text{GHz})} \leq 3.0$ ), SAR is required as shown in the table below where calculated values are greater than 3.0:

Operation frequency = 2450MHz and antenna separation distance = 5mm,  
SAR Test Exclusion Threshold = 10mW

#### Antenna 1

Frequency Band	Maximum AV power		SAR Test Exclusion Threshold	Calculated Threshold Value ( $\leq 3$ SAR is not required)
	(dBuV/3m)	(mW)	(mW)	
2439.35	60.338	0.0003	10	0.00010

#### Antenna 2

Frequency Band	Maximum AV power		SAR Test Exclusion Threshold	Calculated Threshold Value ( $\leq 3$ SAR is not required)
	(dBuV/3m)	(mW)	(mW)	
2430.35	62.088	0.0005	10	0.00015

Note 1: The SAR/MPE measurement is not necessary.

Note 2: The maximum AV power is refer to report No.: 2161093R-E3032110120 from the DEKRA.