



RADIO EXPOSURE TEST REPORT

FCC ID : MSQ-RTBE9B00
Equipment : ROG STRIX WiFi 7 Dual-Band Gaming Router
Brand Name : ASUS
Model Name : GS-BE7200X
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei City 112, Taiwan
Standard : 47 CFR Part 2.1091

The product was received on Sep. 26, 2025, and testing was started from Oct. 01, 2025 and completed on Dec. 24, 2025. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A1_1 Ver1.1

Page Number : 3 of 10
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Report Version : 01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Muse Chan



1 General Description

1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range (MHz)	Operating Frequency (MHz)	Modulation Type
2.4GHz WLAN	2400-2483.5	2412-2462	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) VHT: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)
5GHz WLAN	5150-5250 5250-5350 5470-5725 5725-5850	5180-5250 5250-5320 5500-5720 5745-5825	802.11a/n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) 802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM) 802.11be: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM, 4096QAM)



1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz					
1	4	2	T&W	EmP378b-B-I75(R)	PCB	I-PEX	Note 1
2	3	1	T&W	EmP378b-B-I130(B)	PCB	I-PEX	
3	-	6	T&W	EmP373-B-I100(G)	PCB	I-PEX	
4	1	-	T&W	EmP160-B-I90(B)	PCB	I-PEX	
5	2	-	T&W	EmP160-B-I160(B)	PCB	I-PEX	
6	-	5	T&W	EmP262-B-I80(B)	PCB	I-PEX	
7	-	4	T&W	EmP262-B-I135(Blue)	PCB	I-PEX	
8	-	3	T&W	EmP209e-B-I110(W)	PCB	I-PEX	

Note 1:

Ant.	Port		Antenna Gain (dBi)			
	2.4GHz	5GHz	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C
1	4	2	3	3	3	3
2	3	1	3	3	3	3
3	-	6	-	-	3	3
4	1	-	3	-	-	-
5	2	-	3	-	-	-
6	-	5	-	3	3	3
7	-	4	-	3	3	3
8	-	3	-	3	3	3

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_m} \left\{ \sum_{k=1}^{N_{ANT}} \xi_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_m} \left\{ \sum_{k=1}^{N_{ANT}} \xi_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_m} \left\{ \sum_{k=1}^{N_{ANT}} \xi_{j,k} \right\}^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_m} \left\{ \sum_{k=1}^{N_{ANT}} \xi_{j,k} \right\}^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,2) = 10^{G3/20} ; NSS1(g1,2) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

$$2.4G \ G1= 3 \text{ dBi} ; G2= 3 \text{ dBi} ; G3= 3 \text{ dBi} ; G4= 3 \text{ dBi} ; DG= 9.02\text{dBi}$$

$$5G \text{ UNII-1} \ G1= 3 \text{ dBi} ; G2= 3 \text{ dBi} ; G3= 3 \text{ dBi} ; G4= 3 \text{ dBi} ; DG= 9.02\text{dBi}$$

$$5G \text{ UNII-2A} \ G1= 3 \text{ dBi} ; G2= 3 \text{ dBi} ; G3= 3 \text{ dBi} ; G4= 3 \text{ dBi} ; DG= 9.02\text{dBi}$$

$$5G \text{ UNII-2C} \ G1= 3 \text{ dBi} ; G2= 3 \text{ dBi} ; G3= 3 \text{ dBi} ; G4= 3 \text{ dBi} ; DG= 9.02\text{dBi}$$

$$5G \text{ UNII-3} \ G1= 3 \text{ dBi} ; G2= 3 \text{ dBi} ; G3= 3 \text{ dBi} ; G4= 3 \text{ dBi} ; DG= 9.02\text{dBi}$$

For WLAN 2.4GHz function:

For IEEE 802.11b/g/n/VHT/ax/be mode (4TX/4RX):

Port 1~Port 4 can be use as transmitting/receiving antenna.

Port 1~Port 4 could transmit/receive simultaneously.

For WLAN 5GHz function:

For IEEE 802.11n/a/ac/ax/be mode(4TX/5RX):

Port 1~5 can be used as receiving antenna, but only Port 1~4 can be used as transmitting antenna.

Port 1~5 could receive simultaneously, but only Port 1~4 could transmit simultaneously.

For Zero-wait function (1RX):

Port 6 can be used as a receiving antenna.



1.3 Table for EUT Support Function

Function	Supports Band
AP Router	Master
Bridge	Slave without radar detection
Extender	Master
Mesh	Master

Note 1: The 2.5G WAN/LAN port and 10G WAN port are fixed on the LAN function in the WWAN mode.

Note 2: The USB port on this device supports both storage and WWAN functionality.

Note 3: The above information was declared by manufacturer.

1.4 Table for I/O port

I/O port	Support Function	Support Speed
1G LAN (port 1~4)*4	LAN	10/100/1000Mbps
2.5G WAN/LAN (port 5)*1	LAN/WAN	100/1000/2500Mbps
10G WAN (port 6)*1	LAN/WAN	100Mbps/1Gbps/2.5Gbps/10Gbps
USB3.0*1	Storage/WWAN	-

Note: The above information was declared by manufacturer.

1.5 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	KEYU	KA3601A-1203000US	INPUT: 100-240V~50/60Hz, 1.0A Max OUTPUT: 12V, 3000mA
Adapter 2	SOY	SOY-1200300US-540	INPUT: 100-240V~50/60Hz, 0.9A Max. OUTPUT: 12V, 3A
Others			
RJ-45 cable*1: Shielded, 1.5m			

1.6 Testing Location

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.



2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	*(100)	<6
3.0-30	1842/f	4.89/f	*(900/f ²)	<6
30-300	61.4	0.163	1.0	<6
300-1500	-	-	f/300	<6
1500-100,000	-	-	5	<6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f ²)	<30
30-300	27.5	0.073	0.2	<30
300-1500	-	-	f/1500	<30
1500-100,000	-	-	1.0	<30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Method

The MPE was calculated at 27 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$



2.3 Calculated Result and Limit

Exposure Environment: General Population / Uncontrolled Exposure

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;D1D	9.02	26.90	35.92	0.07	35.99	27	0.43357	1.00000	0.43357
5.2G;D1D	9.02	26.95	35.97	0.02	35.99	27	0.43357	1.00000	0.43357
5.3G;D1D	9.02	20.93	29.95	0.02	29.97	27	0.10841	1.00000	0.10841
5.6G;D1D	9.02	20.94	29.96	0.01	29.97	27	0.10841	1.00000	0.10841
5.8G;D1D	9.02	26.89	35.91	0.08	35.99	27	0.43357	1.00000	0.43357
Band12;G7D	-	-	24.00	0.50	24.50	27	0.03077	0.46600	0.06603

Simultaneous Transmission Analysis Mode:

Test Mode: Mode 1_WLAN 2.4GHz + WLAN 5GHz

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;D1D	9.02	26.90	35.92	0.07	35.99	27	0.43357	1.00000	0.43357
5.8G;D1D	9.02	26.89	35.91	0.08	35.99	27	0.43357	1.00000	0.43357
Sum S/Limit Ratio	0.86714								
Ratio Limit	1								

Test Mode: Mode 2_WLAN 2.4GHz + WLAN 5GHz + WWAN

Mode	DG (dBi)	Power (dBm)	EIRP (dBm)	Tolerance (dB)	Tune-up EIRP (dBm)	Distance (cm)	S (mW/cm ²)	S Limit (mW/cm ²)	Ratio (S/Limit)
2.4G;D1D	9.02	26.90	35.92	0.07	35.99	27	0.43357	1.00000	0.43357
5.8G;D1D	9.02	26.89	35.91	0.08	35.99	27	0.43357	1.00000	0.43357
Band12;G7D	-	-	24.00	0.50	24.50	27	0.03077	0.46600	0.06603
Sum S/Limit Ratio	0.93317								
Ratio Limit	1								

—————THE END—————