



**中认信通**

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



# MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

**Applicant: Shenzhen Renqing Excellent Technology Co., Ltd.**

Address: 104, No.15, Longfu Industrial Zone, Huarong Road, Tongsheng  
Community, Dalang Street, Longhua District, Shenzhen, China

**FCC ID: 2AUA9-RQZY010**

**Product Name: AX3200 Smart Wi-Fi 6 Router**

**Model Number: RSD0620**

**Standard(s): 47 CFR §1.1310, 47 CFR §2.1091,  
47 CFR §15.247(i), 7 CFR §15.407(f)**

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

**Report Number: CR21090071-00D**

**Date Of Issue: 2022-05-18**

**Reviewed By: Sun Zhong**

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Title: Manager

**Test Laboratory: China Certification ICT Co., Ltd (Dongguan)**

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**Test Facility**

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

**Declarations**

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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## 1.1 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### 1.1.1 Applicable Standard

FCC §15.247 (i) & §15.407 (f) & §1.1310 & §2.1091

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See §1.1307(b)(1) of this chapter.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
<b>Frequency Range (MHz)</b>	<b>Electric Field Strength (V/m)</b>	<b>Magnetic Field Strength (A/m)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>Averaging Time (minutes)</b>
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

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

According to §1.1310 and §2.1091 RF exposure is calculated.

### 1.1.2 Procedure

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

**1.1.3 EUT Information ▲ :**

Operation Modes	Operation Frequency (MHz)	Conducted output power including Tune-up Tolerance (dBm)	Maximum Antenna Gain (dBi)	Simultaneously Transmission
Wi-Fi 2.4G	2412-2462	28	5.0	No
Wi-Fi 5.2G	5180-5240	18	5.0	No
Wi-Fi 5.8G	5745-5825	22	5.0	No

The Above Parameters were provided by the manufacturer

**1.1.4 Calculated Result:**

Operation Bands	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
		(dBi)	(numeric)	(dBm)	(mW)			
2.4GHz	2412-2462	5	3.16	28	630.96	20.00	0.40	1.0
5.2GHz	5150-5250	5	3.16	18	63.10	20.00	0.04	1.0
5.8GHz	5725-5850	5	3.16	22	158.49	20.00	0.10	1.0

**Result:** The device meet FCC MPE at 20 cm distance.

**===== END OF REPORT =====**