



## **FCC RF EXPOSURE REPORT**

### **CERTIFICATION TEST REPORT**

*For*

**IEEE 802.11b/g/n/a/ac 2T2R USB Wifi module Integrated BT 2.1+EDR/4.2/5.1**

**MODEL NUMBER: EL.MT7663BUN-WF**

**FCC ID: 2AWY6-ELMT7663BUN**

**REPORT NUMBER: 4790147134.1-5**

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**Prepared for**

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
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# 1. ATTESTATION OF TEST RESULTS

## Applicant Information

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## Manufacturer Information

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 Address: Floor1, Workshop1, NO.88, SOUTH BAOTONG ROAD, XIKENG COMMUNITY, YUANSHAN STREET, LONGGANG DISTRICT, Shenzhen, China

## EUT Information

EUT Name: IEEE 802.11b/g/n/a/ac 2T2R USB Wifi module Integrated BT 2.1+EDR/4.2/5.1  
 Model: EL.MT7663BUN-WF  
 Sample Received Date: October 18, 2021  
 Sample Status: Normal  
 Sample ID: 4295515  
 Date of Tested: October 18, 2021~ October 30, 2021

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	PASS

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p>
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Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

## 4. REQUIREMENT

### LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

### RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (Minutes)
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

### CALCULATION METHOD

$$S=PG/4\pi R^2$$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna



**CALCULATED RESULTS**

Worst Case					
Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
BLE	5	2.64	0.00116	1.0	Complies

Worst Case					
Mode	Output Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
BT	9	2.64	0.00290	1.0	Complies

Worst Case					
Mode	Output Power	Directional Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
WIFI 2.4G	19	5.64	0.05791	1.0	Complies

Worst Case					
Mode	Output Power	Directional Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
WIFI 5G	19	6.47	0.07010	1.0	Complies

Note:

1. The Power comes from report operation description.
2. BT + 2.4 GHz WiFi = 0.00290 + 0.05791 = 0.06081 (mW/cm<sup>2</sup>)  
BT + 5 GHz WiFi = 0.00290 + 0.07010 = 0.073 (mW/cm<sup>2</sup>)  
Therefor the maximum calculations of above situations are less than the "1" limit.
3. The minimum separation distance of the device is greater than 20 cm.
4. Calculate by WORST-CASE mode.

**END OF REPORT**