

RF EXPOSURE REPORT

Applicant	Guangdong Changhong Electronics Co., Ltd
Address	No.1 North Xingye Rd, Nantou Town, Zhongshan city, Guangdong Province, China

Manufacturer or Supplier	Guangdong Changhong Electronics Co., Ltd
Address	No.1 North Xingye Rd, Nantou Town, Zhongshan city, Guangdong Province, China
Product	WiFi & BT Module
Brand Name	CHANGHONG, CHiQ
Model	CH-7663B-BZ-D
Additional Model & Model Difference	CH-7663B-BZ-D-1, CH-7663B-BZ-D-2. etc. see item 3.1
Date of tests	Sep. 01, 2025 ~ Oct. 13, 2025

- ☒ **FCC Part 2 (Section 2.1091)**
☒ **KDB 447498 D01**
☒ **IEEE C95.1**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

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Date: Oct. 15, 2025

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2507WDG0401	Original release	Oct. 15, 2025

1 CERTIFICATION

PRODUCT:	WiFi & BT Module
BRAND NAME:	CHANGHONG, CHiQ
MODEL NO.:	CH-7663B-BZ-D
ADDITIONAL MODELS:	CH-7663B-BZ-D-1, CH-7663B-BZ-D-2, CH-7663B-BZ-D-3, CH-7663B-BZ-D-4, CH-7663B-BZ-D-5, CH-7663B-BZ-D-6, CH-7663B-BZ-D-7, CH-7663B-BZ-D-8, CH-7663B-BZ-D-9, CH-7663B-BZ-C, CH-7663B-BZ-C-1, CH-7663B-BZ-C-2, CH-7663B-BZ-C-3, CH-7663B-BZ-C-4, CH-7663B-BZ-C-5, CH-7663B-BZ-C-6, CH-7663B-BZ-C-7, CH-7663B-BZ-C-8, CH-7663B-BZ-C-9
FCC ID:	2ABNO-CH-7663B-BZ
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Guangdong Changhong Electronics Co., Ltd
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

NOTE:

- Additional models (see below table) are identical with the test model except for the following differences:

MODEL NO.	Bluetooth antenna	Trade name
CH-7663B-BZ-D	Bluetooth antenna uses the PCB antenna on the mainboard	CHANGHONG, CHiQ
CH-7663B-BZ-D-1		
CH-7663B-BZ-D-2		
CH-7663B-BZ-D-3		
CH-7663B-BZ-D-4		
CH-7663B-BZ-D-5		
CH-7663B-BZ-D-6		
CH-7663B-BZ-D-7		
CH-7663B-BZ-D-8		
CH-7663B-BZ-D-9		
CH-7663B-BZ-C	Bluetooth antenna is pulled out, using a PIFA antenna	
CH-7663B-BZ-C-1		
CH-7663B-BZ-C-2		

CH-7663B-BZ-C-3		
CH-7663B-BZ-C-4		
CH-7663B-BZ-C-5		
CH-7663B-BZ-C-6		
CH-7663B-BZ-C-7		
CH-7663B-BZ-C-8		
CH-7663B-BZ-C-9		

Note: Regarding the use of the Bluetooth antenna, the product comes with either a PCB or PIFA antenna by default. It will not use both antennas simultaneously

2 RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

MPE calculation Formula

$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

4 ANTENNA GAIN

Regarding the antennas provided for the EUT, please refer to the following table:

Frequency Band	Antenna Gain (dBi)	Antenna Type
BT 2.4GHz	2.0	PCB Antenna
	2.85	PIFA Antenna
Wi-Fi 2.4GHz	Chain 0: 1.20	PIFA Antenna
	Chain 1: 1.76	PIFA Antenna
Wi-Fi 5GHz	Chain 0: 3.25	PIFA Antenna
	Chain 1: 3.55	PIFA Antenna

5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-FHSS	2402 ~ 2480	3	+2	1	5
BT-LE 1,2Mbps	2402 ~ 2480	0	+2	-2	4
Wi-Fi 2.4GHz	2412 ~ 2462	17	+2	15	19
Wi-Fi 5GHz	5150 ~ 5250, 5260 ~ 5320, 5500 ~ 5700, 5725 ~ 5850	18	+2	16	20

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT-FHSS	2402	3.57
BT-LE 1,2Mbps	2402	0.31
Wi-Fi 2.4GHz	2437	17.87
Wi-Fi 5GHz	5210	18.33

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
BT	5	2.85	20	0.001213	1.0
Wi-Fi 2.4GHz	19	1.76	20	0.023699	1.0
Wi-Fi 5GHz	20	3.55	20	0.045054	1.0

CONCLUSION:

The BT and Wi-Fi can transmit simultaneously, but Wi-Fi 2.4G and Wi-Fi 5G can not transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$(0.001213/1)+(0.045054/1)= 0.046266<1, \text{ which is less than the "1" limit.}$$

Therefore, this device complies with FCC's RF radiation exposure limits for the general population without SAR evaluation.

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