

Test Report No.:
FCC2022-0014-EMF

Test Report

EUT : Bluetooth module
MODEL : MB5601L
BRAND NAME : N/A
APPLICANT : Hua Shu Communications(Shenzhen) Co.,Ltd
Classification Of Test : N/A

CVC Testing Technology Co., Ltd.



CVC Testing Technology Co., Ltd.

Test Report No.: FCC2022-0034-HPage 2 of 7

Client	Name :Hua Shu Communications(Shenzhen) Co.,Ltd Address : Room 125, Building 1, South District of Yuanchuangspace, Mingzhu Branch Road, Minzhi Street, Longhua District, Shenzhen		
Manufacturer	Name :Hua Shu Communications(Shenzhen) Co.,Ltd Address : Room 125, Building 1, South District of Yuanchuangspace, Mingzhu Branch Road, Minzhi Street, Longhua District, Shenzhen		
Equipment Under Test	Name : Bluetooth module Model/Type:MB5601L Trade mark :N/A Serial NO.:N/A Sampe NO.:4-1		
Date of Receipt.	2022.06.08	Date of Testing	2022.06.08~2022.07.08
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D01 IEEE C95.1		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Issue Date: 2021.07.08		
Tested by:  Xu ZhenFei Name Signature	Reviewed by:  Liu YongHai Name Signature	Approved by:  Chen HuaWen Name Signature	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



TABLE OF CONTENTS

RELEASE CONTROL RECORD	4
1. GERTIFICATION.....	5
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	6
5. ANTENNA GAIN.....	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER.....	6



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCC2022-0034-H	Original release	2022.07.08



1. GERTIFICATION

PRODUCT	Bluetooth module
BRAND	N/A
MODEL	MB5601L
ADDITIONAL MODEL	N/A
FCC ID	2A75I5601L
POWER SUPPLY	DC 3.3V from host unit
OPERATING FREQUENCY	2402-2480MHz for BT-LE
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A
Remark: 1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report. 3. EUT photo refer to the report (Report NO.: FCC2022-0034-E).	

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

3. MPE CALCULATION FORMULA

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

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



4. 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**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
BT	2.0	PCB Antenna

Note: The Antenna Gain is provided by the manufacturer. The laboratoer is not responsible for the technical data provided by the customer

6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT-LE (1Mbps)	2402-2480MHz	-4	+1	-5	-3
BT-LE (2Mbps)	2402-2480MHz	-4	+1	-5	-3

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT-LE (1Mbps)	2402	-4.13
BT-LE (2Mbps)	2402	-4.12

CALCULATION RESULT

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)	Verdict
BT-LE (1Mbps)	-3	2	20	0.0002	1.0	Exempt from SAR
BT-LE (2Mbps)	-3	2	20	0.0002	1.0	Exempt from SAR



Important

- (1) The test report is valid with the official seal of the laboratory and the signatures of Test engineer, Author and Reviewer simultaneously.
- (2) The test report is invalid if altered.
- (3) Any photocopies or part photocopies in the test report are forbidden without the written permission from the laboratory.
- (4) Objections to the test report must be submitted to the laboratory within 15 days.
- (5) Generally, commission test is responsible for the tested samples only.
- (6) Any photocopies or part photocopies of the test report are forbidden without the written permission from CVC;

Address of the laboratory:

CVC Testing Technology Co., Ltd.

Address: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China

Post Code: 510663 Tel: 020-32293888

FAX: 020-32293889 E-mail: office@cvc.org.cn