




TEST REPORT

FCC ID :	2AFW2B047S	
Test Report No :	TCT220719E006	
Date of issue :	Aug. 01, 2022	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name :	Shenzhen DZH Industrial Co., Ltd	
Address :	3th Floor, YiTuo Mike Industrial A building, Bu Yong Industrial D zone, ShaJing, Shenzhen, China	
Manufacturer's name ... :	Shenzhen DZH Industrial Co., Ltd	
Address :	3th Floor, YiTuo Mike Industrial A building, Bu Yong Industrial D zone, ShaJing, Shenzhen, China	
Standard(s)	FCC CFR Title 47 Part 1.1307 KDB 447498 D04 Interim General RF Exposure Guidance v01	
Product Name :	Bluetooth Keyboard	
Trade Mark	N/A	
Model/Type reference :	B047S, B093	
Rating(s)	Rechargeable Li-ion Battery DC 3.7V	
Date of receipt of test item	Jul. 19, 2022	
Date (s) of performance of test :	Jul. 19, 2022 - Aug. 01, 2022	
Tested by (+signature) ... :	Onnado YE	
Check by (+signature) :	Beryl ZHAO	
Approved by (+signature) :	Tomsin	



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Table of Contents

1. General Product Information	3
1.1. EUT description	3
1.2. Model(s) list.....	3
2. General Information.....	4
2.1. Test environment and mode.....	4
2.2. Description of Support Units.....	4
3. Facilities and Accreditations	5
3.1. Facilities	5
3.2. Location	5
4. Test Results and Measurement Data	6

1. General Product Information

1.1. EUT description

Product Name.....:	Bluetooth Keyboard
Model/Type reference.....:	B047S
Sample Number.....:	TCT220719E005-0101
Operation Frequency	2402MHz~2480MHz
Modulation Type.....:	GFSK
Antenna Type.....:	Chip Antenna
Antenna Gain.....:	1.87dBi
Rating(s)	Rechargeable Li-ion Battery DC 3.7V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	B047S	<input checked="" type="checkbox"/>
Other models	B093	<input checked="" type="checkbox"/>

Note: 1. B047S is tested model, other models are derivative models. The models are identical in circuit and PCB layout, different on the model names and the bottom shell material.

2. B047S is made of leather, B093 is made of metal, They are tested for differences in conducted and radiated.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 3.7V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098
SHENZHEN TONGCE TESTING LAB
Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1
SHENZHEN TONGCE TESTING LAB
CAB identifier: CN0031

The testing lab has been recognized by Innovation, Science and Economic Development Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict,
Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

According to KDB 447498 D04 Interim General RF Exposure Guidance:

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula (B.2).

$$P_{th} (mW) = ERP_{20\text{ cm}}(d/20\text{ cm})^x \quad d \leq 20\text{ cm}$$

or (B.2)

$$P_{th} (mW) = ERP_{20\text{ cm}} \quad 20\text{ cm} < d \leq 40\text{ cm}$$

where

$$x = -\log_{10}(60/ERP_{20\text{ cm}} \sqrt{f})$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20\text{ cm}}$ is per Formula (B.1).

The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)									
	5	10	15	20	25	30	35	40	45	50
300	39	65	88	110	129	148	166	184	201	217
450	22	44	67	89	112	135	158	180	203	226
835	9	25	44	66	90	116	145	175	207	240
1900	3	12	26	44	66	92	122	157	195	236
2450	3	10	22	38	59	83	111	143	179	219
3600	2	8	18	32	49	71	96	125	158	195
5800	1	6	14	25	40	58	80	106	136	169

For the separation distance =5mm

Maximum Conducted Output Power and Max. ERP of product is as follow

For BDR+EDR:

Modulation	Operate Frequency (MHz)	Maximum Conducted Output Power (dBm)	Antenna gain (dBi)	Max. ERP (dBm)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)	Limit (mW)
GFSK	2402	-3.08	1.87	-1.21	-2±1	-1	0.79	3

Result:

Because the max tune up power is less than the exemption limit, so No SAR measurement is required.

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