


RF Exposure Evaluation Report

Application No.: BTEK240111004AE
Applicant: SHENZHEN ECARE ELECTRONICS CO., LTD
Address of Applicant: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China
Manufacturer: SHENZHEN ECARE ELECTRONICS CO., LTD
Address of Manufacturer: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China
Factory: SHENZHEN ECARE ELECTRONICS CO., LTD
Address of Factory: B201/B401/B501/B601, Hua Li Industrial Building, 404 Yu An Road, Bao An, Shenzhen, Guang Dong, China
Equipment Under Test (EUT):
EUT Name: Bluetooth module
Model No.: TP972, TP971W, I71, TP971, TP972W, I72
Please refer to section 3 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark: N/A
Standard(s) : 47 CFR Part 2 Subpart J Section 2.1093
Date of Receipt: 2024-01-11
Date of Test: 2024-01-11 to 2024-01-27
Date of Issue: 2024-01-31


Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.


Damon Su
EMC Laboratory Manager



Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-01-31		Original

Authorized for issue by:			
			
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	Elma Yang /Project Engineer		
			
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	Carl Yang /Reviewer		



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3 General Information

3.1 Details of E.U.T.

Power supply:	DC 3.3V
For BLE	
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK
Channel Spacing:	2MHz
Date Rate:	1Mbps, 2Mbps
Number of Channels:	40
Antenna Type:	PCB Antenna
Antenna Gain:	0 dBi
Sample No.:	BTEK240111004AE-01
Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information.	

Model No.: TP972, TP971W, I71, TP971, TP972W, I72

Only the module TP972 was tested. According to the declaration from the applicant, Only the name is different, the modules used by other models are the same.

3.2 Description of Support Units

The EUT has been tested as an independent unit.



3.3 Test Location

All tests were performed at:

Shenzhen BANTEK Testing Co., Ltd.

A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogang Community, Shajing Street, Bao'an District, Shenzhen, Guangdong, China 518104

Tel:0755-2334 4200 Fax: 0755-2334 4200

FCC Registration Number: 264293

Designation Number: CN1356

No tests were sub-contracted.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



4 Test Requirement

KDB447498 D01 General RF Exposure Guidance v06, Clause 4.3.1(a)

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0$

Where

-f(GHz) is the RF channel transmit frequency in GHz

-Power and distance are rounded to the nearest mW and mm before calculation

-The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

4.1 Test Data and Test Result

Type	Frequency (MHz)	Conducted Power (dBm)	Maximum Tune-up (dBm)	Calculating data	Limit	Result
BLE	2402	-0.74	0	0.310	3.0	Pass

Note: The exposure evaluation safety distance is 5mm.

5 EUT Constructional Details

Refer to Appendix - External and Internal Appendix EUT Photos.

