



RF EXPOSURE REPORT

Applicant	:	Guangzhou FiiO Electronics Technology Co., Ltd.
Address of Applicant	:	No.21, Longliang Road, Xialiang Village, Longgui Street, Baiyun District, Guangzhou, Guangdong, P.R. China
Manufacturer	:	Guangzhou FiiO Electronics Technology Co., Ltd.
Address of Manufacturer	:	No.21, Longliang Road, Xialiang Village, Longgui Street, Baiyun District, Guangzhou, Guangdong, P.R. China
Equipment under Test	:	True Wireless Bluetooth Headphone Amplifier
Model No.	:	F5151U, F2501U, F2502U, F2503U, F2504U, F2505U, F2506U, F2507U, F2508U, F2509U, F2500U
FCC ID	:	R56-FC2001
Test Standard(s)	:	KDB447498 D01 General RF Exposure Guidance v06 47 CFR Part 15 §2.1093
Report No.	:	DDT-RE25103113-2E09
Issue Date	:	2026/06/30
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Manufacturer	:	Guangzhou FiiO Electronics Technology Co., Ltd.
Address of Manufacturer	:	No.21, Longliang Road, Xialiang Village, Longgui Street, Baiyun District, Guangzhou, Guangdong, P.R. China

Test Standard Used:
KDB447498 D01 General RF Exposure Guidance v06
47 CFR Part 15 §2.1093

We Declare:
The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25103113-2E09		
Date of Receipt:	2026/01/04	Date of Test:	2026/01/04~2026/06/12

Created: Chen Ziqin	Reviewed: Chen Ziqin	Approved: Ella Gong
		
2026/06/09	2026/06/30	2026/06/30

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2026/06/30	Ella Gong

1. General Test Information

1.1. Description of EUT

EUT Name	:	True Wireless Bluetooth Headphone Amplifier
Model Number	:	F5151U, F2501U, F2502U, F2503U, F2504U, F2505U, F2506U, F2507U, F2508U, F2509U, F2500U
Difference of model number	:	Above models are identical in schematic and structure, only the model number are different, therefore the test performed on the model F5151U
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	DC 5V from USB cable or DC 3.8V built-in battery

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual.

1.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

1.3. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2. RF Exposure evaluation for FCC

2.1. Assessment procedure

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

$\cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

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

The result is rounded to one decimal place for comparison

Appendix A

SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):³³

- 1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f_{\text{(MHz)}})]$
- 2) For test separation distances ≤ 50 mm, the power threshold determined by the equation in c) 1) for 50 mm and 100 MHz is multiplied by $^{\frac{1}{2}}$
- 3) SAR measurement procedures are not established below 100 MHz.

Appendix C

SAR Test Exclusion Thresholds for < 100 MHz and < 200 mm

Approximate SAR test exclusion power thresholds at selected frequencies and test separation distances are illustrated in the following table. The equation and threshold in 4.3.1 must be applied to determine SAR test exclusion.

MHz	< 50	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
100	237	474	481	487	494	501	507	514	521	527	534	541	547	554	561	567	mW
50	308	617	625	634	643	651	660	669	677	686	695	703	712	721	729	738	
10	474	948	961	975	988	1001	1015	1028	1041	1055	1068	1081	1095	1108	1121	1135	
1	711	1422	1442	1462	1482	1502	1522	1542	1562	1582	1602	1622	1642	1662	1682	1702	
0.1	948	1896	1923	1949	1976	2003	2029	2056	2083	2109	2136	2163	2189	2216	2243	2269	
0.05	1019	2039	2067	2096	2125	2153	2182	2211	2239	2268	2297	2325	2354	2383	2411	2440	
0.01	1185	2370	2403	2437	2470	2503	2537	2570	2603	2637	2670	2703	2737	2770	2803	2837	

According to ANSI C63.10-2020

The requirements for unwanted emissions in the restricted-bands are as follows:

- a) For all measurements, follow the requirements in 12.7.4.
- b) At frequencies below 1000 MHz, use the procedure described in 12.7.5.
- c) At frequencies above 1000 MHz, the measurement results from the peak and average measurement procedures described in 12.7.6 and 12.7.7, respectively, shall satisfy the respective peak and average limits; if all peak measurement results satisfy the average limit, then average measurements are not required.
- d) For conducted measurements above 1000 MHz, EIRP shall be computed as specified in 12.7.4.2, and then field strength shall be computed as follows (see also Annex G):
 - 1) $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} - 20 \log(d[\text{m}]) + 104.77$, where E is field strength and d is distance at which the field strength limit is specified in the applicable requirements.
 - 2) $E \text{ [dB}\mu\text{V/m]} = \text{EIRP [dBm]} + 95.2$, for $d = 3 \text{ m}$.
- e) For conducted measurements below 1000 MHz, the field strength shall be computed as specified in item d), and then an additional 4.7 dB shall be added as an upper bound on the field strength that would be observed on a test range with a ground plane for frequencies between 30 MHz and 1000 MHz, or an additional 6 dB shall be added for frequencies below 30 MHz.

2.2. Assess result

Manufacturing Tolerance:

Bluetooth LE:

Mode	Antenna	Frequency [MHz]	Target (dBm)	Tolerance ±(dB)
Bluetooth LE 1M (Peak)	Ant1	2402	3.5	1
		2440	2.0	1
		2480	2.5	1
Bluetooth LE 2M (Peak)	Ant1	2404	3.5	1
		2440	2.0	1
		2478	2.5	1

13.56MHz:

Mode	Antenna	Frequency [MHz]	Target Power	Tolerance ±(dBm)	Target Power + Tolerance ±(mw)	Limit (mw)
ASK(Peak)	Ant1	13.56	-42.5	1	0.00000006	308

PK Output Power=51.73dBuV/m@3m-95.2=-43.47dBm

Estimation Result:

Worse case is as below: [2402 MHz, 4.5 dBm, (2.82 mW) output power]

$(2.82/5) \cdot [\sqrt{2.402(\text{GHz})}] = 0.874 < 3.0$ for 1-g SAR

The evaluation results of Standalone BT and 13.56MHz can be found in DDT-RE25103113-2E07 and DDT-RE25103113-2E08 report

Simultaneous transmit evaluation worst result: BLE+13.56MHz=0.874/3+0.00000006/308=0.291<1.

Then SAR evaluation is not required.

-----End Report-----