

RF Exposure Evaluation Report

Report No.: 2405Z104533EE

Applicant: Shenzhen Baida Moxing Co.,Ltd.

Address: Room 2005-2, Building 6, Tian'an Cloud Park, Gangtou Community, Bantian St., Longgang Dist. Shenzhen China

Product Name: LiteRadio 4 Radio Transmitter

Product Model: LiteRadio 4 SE

Multiple Models: LiteRadio 4

Trade Mark:  **BETAFPV**

FCC ID: 2AT6X-LITERADIO4SE

Standards: 47 CFR §1.1310

KDB 447498 D01 General RF Exposure Guidance v06

Test Date: 2025-04-15

Test Result: Complied

Report Date: 2025-04-15

Reviewed by:

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Revision History

Version No.	Issued Date	Description
00	2025-04-15	Original

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1 General Information

1.1 Client Information

Applicant:	Shenzhen Baida Moxing Co.,Ltd.
Address:	Room 2005-2, Building 6, Tian'an Cloud Park, Gangtou Community, Bantian St., Longgang Dist. Shenzhen China
Manufacturer:	Shenzhen Baida Moxing Co.,Ltd.
Address:	Room 2005-2, Building 6, Tian'an Cloud Park, Gangtou Community, Bantian St., Longgang Dist. Shenzhen China

1.2 Product Description of EUT

The EUT is LiteRadio 4 Radio Transmitter that contains BLE, 2.4G WLAN and 2.4G SRD radios.

Sample Serial Number	2UDZ-1(LiteRadio 4 SE), 2UDZ-6(LiteRadio 4) for CE Test, 2UDZ-2(LiteRadio 4 SE), 2UDZ-6(LiteRadio 4) for RE test, 2UDZ-3(LiteRadio 4 SE) for RF conducted test (assigned by WATC)
Sample Received Date	2024-11-13
Sample Status	Good Condition
Frequency Range	BLE: 2402-2480MHz 2.4G WLAN: 2412-2472MHz 2.4G SRD: 2403.4 – 2479.4MHz
Maximum Conducted Output Power	BLE: -0.25dBm 2.4G WLAN: 18.32dBm 2.4G SRD: 16.77dBm
Modulation Technology	GFSK, DSSS, OFDM
Antenna Gain [#]	BLE/2.4G WLAN: -19.4dBi 2.4G SRD: 2.09dBi
Spatial Streams	SISO (1TX, 1RX)
Power Supply	DC 3.7V from battery or DC 5.0V from type C port
Adapter Information	N/A
Modification	Sample No Modification by the test lab

1.3 Laboratory Location

World Alliance Testing & Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

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The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

2 RF Exposure Evaluation

2.1 Standard

According to §1.1310, radio frequency devices shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 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
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 5) in section 4.1 is applied to determine SAR test exclusion.

2.2 Result

Radio	Frequency (MHz)	Maximum Conducted Power including Tune-up Tolerance [#] (dBm)	Min. test separation distance (mm)	Result (10-g extremity SAR)	Exclusion Limit (10-g extremity SAR)	Verdict
BLE	2402-2480	0	5	0.3	7.5	Pass
2.4G WiFi	2412-2472	8.5	5	2.2	7.5	Pass
2.4G SRD	2403.4-2479.4	17.0	5	15.7	7.5	Need SAR test

Note: The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

The device is for handheld used.

The applicant declared the BLE/2.4G WiFi/2.4G SRD not operate at same time.

Result:

For BLE and 2.4G WiFi, the result below the exclusion limit, so no need standalone SAR test.

For 2.4G SRD, standalone SAR test are required, please refer the SAR test report.

---End of Report---