

RF Exposure Evaluation Report

Product : Eilik AI Station
Trade mark : Eilik AI Station
Model/Type reference : Ei-AI-Base
Serial Number : N/A
Report Number : EED32R80798706
FCC ID : 2BLNC-EIKSTATION
Date of Issue : Aug. 13, 2025
Test Standards : 47 CFR Part 1.1307
47 CFR Part 1.1310
47 CFR Part 2.1091
KDB 447498 D04 Interim General RF
Exposure Guidance v01
Test result : PASS

Prepared for:

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2 General Information

2.1 Client Information

Applicant:	Shenzhen Zhuneng Technology Co., Ltd.
Address of Applicant:	405-1, Honglang North, Zhongli Venture Community, No. 49, Dabao Road, Xin'an Street, Baoan District
Manufacturer:	Shenzhen Zhuneng Technology Co., Ltd.
Address of Manufacturer:	405-1, Honglang North, Zhongli Venture Community, No. 49, Dabao Road, Xin'an Street, Baoan District
Factory:	Kpower Technology Co.,Ltd.
Address of Factory:	No.8, Changhong 4th Road, Zhangkeng Village, Hengli Town, Dongguan City, Guangdong Province

2.2 General Description of EUT

Product Name:	Eilik AI Station
Model No.:	Ei-AI-Base
Test Model No.:	Ei-AI-Base
Trade mark:	Eilik AI Station

2.3 Product Specification subjective to this standard

Frequency Range:	BLE/BT: 2402MHz~2480MHz 2.4G Wi-Fi: IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz 5G Wi-Fi U-NII-1: 5150-5250MHz 5G Wi-Fi U-NII-3:5745-5825MHz SRD: 2472MHz
Modulation Type:	BLE: GFSK BT: GFSK, $\pi/4$ DQPSK, 8DPSK 2.4G Wi-Fi: IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g :OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20 and HT40) : OFDM (64QAM, 16QAM,QPSK, BPSK) 5G Wi-Fi: IEEE 802.11a: OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11n(HT20/HT40): OFDM (BPSK, QPSK, 16QAM, 64QAM) IEEE 802.11ac(VHT20/VHT40/VHT80): OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM) SRD: GFSK
Test Power Grade:	Default
Test Software of EUT:	Cmd.exe
Antenna Type:	BLE&BT&2.4G Wi-Fi&5G Wi-Fi: Dual-frequency copper tube antenna SRD: PCB antenna
Antenna Gain:	BLE&BT&2.4G Wi-Fi: 2.7 dBi 5G Wi-Fi: 2.45 dBi

	SRD: 1.01 dBi	
Power Supply:	Adapter:	DC 12V
Sample Received Date:	May 22, 2025	
Sample tested Date:	Jun. 12, 2025 to Jul. 23, 2025	

2.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Hongwei Industrial Park, Zone 70, Bao'an District, Shenzhen, Guangdong, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

3 SAR Evaluation

3.1 RF Exposure Compliance Requirement

3.1.1 Limits

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

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

where

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

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

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

The 1 mW Blanket Exemption of § 1.1307(b)(3)(i)(A) applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power of no more than 1 mW, regardless of separation distance.

3.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3.1.3 EUT RF Exposure Evaluation

For Stand alone:

Frequency (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio	Result
@BLE	20	3.56	2.70	4.11	2.5763	3060	0.0008	Pass
@BT	20	4.96	2.70	5.51	3.5563	3060	0.0012	Pass
@2.4G Wi-Fi	20	12.81	2.70	13.36	21.6770	3060	0.0071	Pass
@5G Wi-Fi	20	11.98	2.45	12.28	16.9044	3060	0.0055	Pass
@2479MHz	20	-16.54	1.01	-17.68	0.0171	3060	0.00001	Pass

Note:

- ① EIRP=conducted power+antenna gain;
- ② $ERP = EIRP - 2.15$;
- ③ $EIRP(dBm) = \text{Field strength of the fundamental signal}(dBuV/m@3m) - 95.23$;
- ④ $ERP(mW) = 10^{(ERP(dBm)/10)}$;
- ⑤ The estimation distance is 20cm.
- ⑥ The test data please refer to the report of EED32R80798701, EED32R80798702, EED32R80798703, EED32R80798704, EED32R80798705, and only the worst case data was recorded in the report.

For Simultaneous Transmission:

As MPE ratio (BT+2.4G Wi-Fi+5G Wi-Fi+2479MHz) = $0.0012^2 + 0.0071^2 + 0.0059^2 + 0.00001^2 = 0.00005 < 1$, it's deemed to fulfil the RF exposure requirement.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;
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*** End of Report ***