

RF Exposure Evaluation Report

Product	:	Headtracker wireless module Tx Pro
Trade mark	:	N/A
Model/Type reference	:	HT Tx Pro
Serial Number	:	N/A
Report Number	:	EED32R80340202
FCC ID	:	2BPLYXF-HT-TX0020
Date of Issue	:	Jun. 04, 2025
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 1.1310 47 CFR Part 2.1091 47 CFR Part 2.1093 KDB 447498 D04 Interim General RF Exposure Guidance v01
Test result	:	PASS

Prepared for:

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Jun. 04, 2025



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1 Version

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3 General Information

3.1 Client Information

Applicant:	Nanjing Xianfei Robot Technology Co., Ltd
Address of Applicant:	6th Floor, Building 7, Artificial Intelligence Industrial Park, No. 266 Chuangyan Road, Jiangning District, Nanjing City, Jiangsu Province
Manufacturer:	Nanjing Xianfei Robot Technology Co., Ltd
Address of Manufacturer:	6th Floor, Building 7, Artificial Intelligence Industrial Park, No. 266 Chuangyan Road, Jiangning District, Nanjing City, Jiangsu Province
Factory:	Nanjing Xianfei Robot Technology Co., Ltd
Address of Factory:	6th Floor, Building 7, Artificial Intelligence Industrial Park, No. 266 Chuangyan Road, Jiangning District, Nanjing City, Jiangsu Province

3.2 General Description of EUT

Product Name:	Headtracker wireless module Tx Pro
Model No.(EUT):	HT Tx Pro
Trade Mark:	N/A

3.3 Product Specification subjective to this standard

Frequency Range:	2400MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	FreeFlightIAP_V3.0.exe
Antenna Type:	Dipole Antenna
Antenna Gain:	3.26dBi
Power Supply:	DC 3.3V
Sample Received Date:	Mar. 25, 2025
Sample tested Date:	Mar. 25, 2025 to Apr. 08, 2025

3.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

3.5 Deviation from Standards

None.

3.6 Abnormalities from Standard Conditions

None.

3.7 Other Information Requested by the Customer

None.

4 SAR Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 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.

4.1.2 Test Procedure

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

4.1.3 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
@2.4GHz	20	21.79	3.26	22.90	194.9845	3060	0.0637	Pass

Note:

- ①EIRP=conducted power+antenna gain;
- ②ERP=EIRP-2.15;
- ③EIRP(dBm) = Field strength of the fundamental signal(dBuV/m@3m) – 95.23;
- ④ERP(mW) = $10^{(ERP\ (dBm)/10)}$;
- ⑤The estimation distance is 20cm;
- ⑥The test data please refer to the report of EED32R80340201 and only the worst case data was recorded in the report.

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 ***