

RF Exposure Evaluation Report

Product : Thermal printer
Trade mark : N/A
Model/Type reference : See Clause 4.2
Serial Number : N/A
Report Number : EED32S812523
FCC ID : 2A6FW-ST82
Date of Issue : Jul. 04, 2026
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:	Xiamen Print Future Technology Co.,Ltd.
Address of Applicant:	Room 701, No.55 Dongling Road, Houxi Town, Jimei District, Xiamen City, Fujian Province, China
Manufacturer:	Xiamen Print Future Technology Co.,Ltd.
Address of Manufacturer:	Room 701, No.55 Dongling Road, Houxi Town, Jimei District, Xiamen City, Fujian Province, China
Factory:	Xiamen Print Future Technology Co.,Ltd.
Address of Factory:	Rooms 501, 601, 701, No.55 Dongling Road, Houxi Town, Jimei District, Xiamen City, Fujian Province, China

2.2 General Description of EUT

Product Name:	Thermal printer
Model No.:	ST82, ST81, ST81A, ST81B, ST81C, ST81D, ST81E, ST81F, ST81G, ST81H, ST81I, ST81J, ST81K, ST81L, ST81M, ST81N, ST81O, ST81P, ST81R, ST80S, ST80T, ST80U, ST80V, ST80W, ST80X, ST80Y, ST80Z, ST80, ST80A, ST80B, ST80C, ST80D, ST80E, ST80F, ST80G, ST80H, ST80I, ST80J, ST80K, ST80L, ST80M, ST80N, ST80O, ST80P, ST80Q, ST80R, ST80S, ST80T, ST80U, ST80V, ST80W, ST80X, ST80Y, ST80Z, ST82, ST82A, ST82B, ST82C, ST82D, ST82E, ST82F, ST82G, ST82H, ST82I, ST82J, ST82K, ST82L, ST82M, ST82N, ST83, ST83A, ST83B, ST83C, ST83D, ST83E, ST83F, ST83G, ST83H, ST83I, ST83J, ST83K, ST83L, ST83M, ST83N, ST82Pro, ST83Pro, X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, L8
Test Model No.:	ST82
Model difference:	They have same electrical, PCB and layout, only the model names and color are different for marketing requirements.
Trade Mark:	N/A

2.3 Product Specification subjective to this standard

Frequency Range:	BLE/BT: 2402MHz~2480MHz	
Modulation Type:	BLE: GFSK BT: GFSK	
Test Power Grade:	Default	
Test Software of EUT:	fcc_test_tool.exe	
Antenna Type:	PCB Antenna	
Antenna Gain:	2.58dBi	
Power Supply:	Battery:	DC 7.4V
	USB Port:	USB 5V
Sample Received Date:	Jun. 12, 2026	
Sample tested Date:	Jun. 12, 2026 to Jun. 22, 2026	

2.4 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, Test Firm Registration No.: 260439

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:**

Freq. (MHz)	Estimation distance (cm)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	ERP (dBm)	ERP (mW)	Limit (mW)	MPE ratio	Result
@BLE	20	-2.99	2.58	-2.56	0.55	3060.00	0.0002	Pass
@BT	20	-3.05	2.58	-2.62	0.55	3060.00	0.0002	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 EED32S812525, EED32S812526 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 ***