

RF Exposure Evaluation Report

Applicant: Xiamen Paperang Technology Co., Ltd.

Address of Applicant: Room 3124, Xuanye Building, Pioneer Park, Xiamen Torch High-tech Zone, Fujian, China

Equipment Under Test (EUT)

Product Name: Thermal Printer

Model No.: P3, P3L, P3S, PAPERANG P3, PAPERANG-P3, P3B2, P3Y2, P3A2, P3Z2, P3N2, P3S2, P3C2, P3W2, P3X2

Trade mark: PAPERANG

FCC ID: 2APWO-PAPERANG-P3

Applicable standards: FCC CFR Title 47 Part 2 Subpart J Section 2.1093
KDB 447498 D01 v06

Date of sample receipt: 29 Mar., 2021

Date of Test: 10 Apr. 2021~ 09 June 2021

Date of report issue: June 18, 2021

Test Result: PASS *

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2 Version

Version No.	Date	Description
00	March 1, 2021	Original

Tested by: Elvis Wang
Test Engineer

Date: June 18, 2021

Reviewed by: [Signature]
Project Engineer

Date: June 18, 2021

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4 General Information

4.1 Client Information

Applicant:	Xiamen Paperang Technology Co., Ltd.
Address:	Room 3124,Xuanye Building, Pioneer Park, Xiamen Torch High-tech Zone, Fujian, China
Manufacturer/Factory:	Xiamen Paperang Technology Co., Ltd.
Address:	Room 3124,Xuanye Building, Pioneer Park, Xiamen Torch High-tech Zone, Fujian, China

4.2 General Description of E.U.T.

Product Name:	Thermal Printer
Model No.:	P3, P3L, P3S, PAPERANG P3, PAPERANG-P3, P3B2, P3Y2, P3A2, P3Z2, P3N2, P3S2, P3C2, P3W2, P3X2
Operation Frequency:	Bluetooth/ BLE: 2402MHz~2480MHz
Modulation technology:	Bluetooth BDR /BLE: GFSK, Bluetooth EDR: $\pi/4$ -DQPSK, 8DPSK
Antenna Type:	PCB Antenna
Antenna gain:	BT/ BLE: 0dBi
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

4.3 Operating Modes

Operating mode	Detail description
BLE mode	Keep the EUT in continuously transmitting in BLE mode
BT mode	Keep the EUT in continuously transmitting in BT mode

4.4 Additions to, deviations, or exclusions from the method

No

4.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1279**

Jianyan Testing Group Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 892155.

● **ISED – CAB identifier.: CN0102**

Jianyan Testing Group Co., Ltd. has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements with ISED#:26114.

● **A2LA - Registration No.: 5568.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/5568-01.pdf>

4.6 Laboratory Location

JianYan Testing Group Co., Ltd.

Address: No.760, Fengling Road, Tong'an District, Xiamen, Fujian, China

Tel: +86-592-2273071, Fax: +86-592-2273700

Email: info-JYTee@lets.com, Website: <http://www.lets.com/>

5 Technical Requirements Specification in FCC CFR Title 47 Part 2.1093

5.1 Limits

According to 447498 D01 General RF Exposure Guidance v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

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

5.2 Result

Worse case for BT as below:

[2480MHz: -1.63dBm (0.69 mW) output power]

$(0.69 \text{ mW} / 5\text{mm}) \cdot [\sqrt{2.480(\text{GHz})}] = 0.217 < 3.0$ for 1-g SAR

5.3 Conclusion

The device is exempt from the RF exposure evaluation.

-----End of report-----