

# TEST REPORT

**Reference No.**..... : WTD25D11297914W005  
**FCC ID** ..... : 2AD6G-R22  
**Applicant**..... : Rongta Technology (Xiamen) Group Co., Ltd.  
**Address**..... : No.88, Tonghui South Road, Tongan, Xiamen City, China  
**Manufacturer** ..... : Rongta Technology (Xiamen) Group Co., Ltd.  
**Address**..... : No.88, Tonghui South Road, Tongan, Xiamen City, China  
**Product**..... : Smart Label Printer  
**Model(s)** ..... : R22, R22A, R22B, R22C, R22D, R22E, R22F, R22G, R22H, R22I, R22J, R22K, R22L, R22M, R22N, R22O, R22P, R22Q, R22R, R22S, R22T, R22U, R22V, R22W, R22X, R22Y, R22Z, R1, R2, R5, P5Pro, R22Pro, R22L, R22D, R23, R23L, R23D, R22L, R22D, R23, R23L, R23D, R23H, R\*\*\*\*(\*=0-9 or A-Z or blank), R2\*\*\*\*(\*=0-9 or A-Z or blank)  
**Standards**..... : 47CFR Part 2 §2.1093  
**Date of Receipt sample** .... : 2025-11-18  
**Date of Test** ..... : 2025-11-21 to 2025-12-22  
**Date of Issue**..... : 2025-12-24  
**Test Result**..... : **Pass**

## Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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## 2. Contents

|                                                   | Page |
|---------------------------------------------------|------|
| 1 COVER PAGE.....                                 | 1    |
| 2. CONTENTS .....                                 | 2    |
| 3. REVISION HISTORY .....                         | 3    |
| 4. GENERAL INFORMATION.....                       | 4    |
| 4.1. GENERAL DESCRIPTION OF E.U.T.....            | 4    |
| 4.2. DETAILS OF E.U.T.....                        | 4    |
| 4.3. TEST FACILITY .....                          | 5    |
| 4.4. SUBCONTRACTED.....                           | 5    |
| 4.5. ABNORMALITIES FROM STANDARD CONDITIONS ..... | 5    |
| 5. TEST SUMMARY .....                             | 6    |
| 6. RF EXPOSURE.....                               | 7    |
| 6.1. DEFINITIONS .....                            | 7    |
| 6.2. METHOD OF EVALUATION.....                    | 7    |
| 6.3. CALCULATION FORMULA.....                     | 8    |
| 6.4. MPE CALCULATION METHOD .....                 | 8    |
| 6.5. EVALUATION RESULTS .....                     | 9    |

3. Revision History

| Test Report No.    | Date of Receipt Sample | Date of Test                   | Date of Issue | Purpose  | Comment | Approved |
|--------------------|------------------------|--------------------------------|---------------|----------|---------|----------|
| WTD25D11297914W005 | 2025-11-18             | 2025-11-21<br>to<br>2025-12-22 | 2025-12-24    | Original | -       | Valid    |

## 4. General Information

### 4.1. General Description of E.U.T.

|                    |                                                                                                                                                                                                                                                                                                                         |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product:           | Smart Label Printer                                                                                                                                                                                                                                                                                                     |
| Model(s):          | R22, R22A, R22B, R22C, R22D, R22E, R22F, R22G, R22H, R22I, R22J, R22K, R22L, R22M, R22N, R22O, R22P, R22Q, R22R, R22S, R22T, R22U, R22V, R22W, R22X, R22Y, R22Z, R1, R2, R5, P5Pro, R22Pro, R22L, R22D, R23, R23L, R23D, R22L, R22D, R23, R23L, R23D, R23H, R****(*=0-9 or A-Z or blank), R2****(*=0-9 or A-Z or blank) |
| Model Description: | Only the model name, appearance color and screen printing of the shell are different.<br>The model R22 was tested in this report.                                                                                                                                                                                       |
| Test Sample No.:   | 1-1/1                                                                                                                                                                                                                                                                                                                   |
| BT Version:        | V5.0                                                                                                                                                                                                                                                                                                                    |
| Hardware Version:  | R22_MB_YC_BU_V*****(*=0-9, A-Z.a-z, "." "_")                                                                                                                                                                                                                                                                            |
| Software Version:  | V*****(*=0-9, A-Z.a-z, "." "_")                                                                                                                                                                                                                                                                                         |

### 4.2. Details of E.U.T.

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| Operation Frequency:   | BT: 2402~2480MHz<br>BLE: 2402~2480MHz<br>NFC: 13.56MHz       |
| Max. RF output power:  | BT: 4.25dBm<br>BLE: 4.82dBm<br>NFC: 64.22dBuV/m @3m distance |
| Modulation Technology: | BT: GFSK<br>BLE: GFSK<br>NFC: ASK                            |
| Antenna installation:  | BT/BLE: PCB Antenna<br>NFC: FPC Antenna                      |
| Antenna Gain:          | BT/BLE: -0.58dBi<br>NFC: 0dBi                                |

**Note:**

#: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, WALTEK lab has not verified the authenticity of its information.

|          |                 |
|----------|-----------------|
| Ratings: | Input: 5V== 1A  |
| Battery: | DC 3.7V 1500mAh |

#### 4.3. Test Facility

The test facility has a test site registered with the following organizations:

**ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.**

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files.

Registration number 7760A, October 15, 2016.

**FCC Designation No.: CN1201. Test Firm Registration No.: 523476.**

Waltek Testing Group Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

#### 4.4. Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

☐ Yes ☒ No

If Yes, list the related test items and lab information:

Test Lab: N/A

Lab address: N/A

Test items: N/A

#### 4.5. Abnormalities from Standard Conditions

None.

## 5. Test Summary

| Test Items                                   | Test Requirement     | Result |
|----------------------------------------------|----------------------|--------|
| Radiofrequency radiation exposure evaluation | 47CFR Part 2 §2.1093 | Pass   |

## 6. RF Exposure

Test Requirement: 47CFR Part 2 Subpart J Section 2.1093  
 47CFR Part 1 §1.1307  
 47CFR Part 1 §1.1310  
 Evaluation Method: KDB 447498 D01 General RF Exposure Guidance v06

### 6.1. Definitions

According to § 2.1093 (b),

A portable device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that the RF source's radiating structure(s) is/are within 20 centimeters of the body of the user.

This device belongs to portable device and with multiple RF sources.

### 6.2. Method of Evaluation

**Determination of Exemption:**  
**For single RF sources**

#### Option A

##### Option A 1-mW Test Exemption

Applies to all frequencies and all distances

- a) Could be considered SAR-based and MPE-based exclusions
- b)  $P < 1\text{mW}$
- c) Limitation—when there are simultaneously operating transmitters this exclusion only applies when all simultaneously operating transmitters meet this exemption
- d) Refer 1.1307(b)(3)(i)(A) and 1.1307(b)(3)(ii)(A)

#### Option B SAR-Based Exemption

Frequency range 300 MHz -6 GHz,  $5\text{mm} \leq \text{distance} \leq 40\text{cm}$

- a) The maximum time-averaged power or effective radiated power (ERP), whichever is greater,  $\leq P_{th}$ .
- b)  $P_{th}$  is calculated based on separation distance  $d$  cm from transmitter to person for the device operating at  $f$  GHz.

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

Where

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

and

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

$d$  = the separation distance (cm);

**Option C MPE-Based Exemption**

1.1307(b)(3)(i)(C): ERP is below a threshold calculated based on the distance R between the person and the antenna / radiating structure, where  $R > \lambda / 2\pi$ .

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

| RF Source frequency (MHz)   | Threshold ERP (watts) |
|-----------------------------|-----------------------|
| 0.3-1.34                    | $1,920 R^2$           |
| 1.34-30                     | $3,450 R^2/f^2$       |
| 30-300                      | $3.83 R^2$            |
| 300-1,500                   | $0.0128 R^2 f$        |
| 1,500-100,000               | $19.2 R^2$            |
| Note: R in meters, f in MHz |                       |

**For multiple RF sources**

According to 47CFR 1.1307(b)(3)(ii), the calculation formula is as follow:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

**6.3. Calculation formula**

According to ANSI C63.10,

$$EIRP = E_{meas} + 20 \log(d_{meas}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

$E_{meas}$  is the field strength of the emission at the measurement distance, in dBμV/m

$d_{meas}$  is the measurement distance, in m

NOTE—Because this equation yields the identical result whether the field strength is extrapolated using the default 20 dB/decade of distance extrapolation factor, or the field strength is not extrapolated for distance, this equation can generally be applied directly (with no further correction) to determine EIRP. In some cases, a different distance correction factor may be required

**6.4. MPE Calculation Method**

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = output power to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

## 6.5. Evaluation Results

### Single Source Transmissions

#### NFC

| Frequency<br>(MHz) | E<br>(dB $\mu$ V/m) | EIRP<br>(dBm) | EIRP<br>(mW) | Power density<br>(mW/cm <sup>2</sup> ) |                | Ratio     |
|--------------------|---------------------|---------------|--------------|----------------------------------------|----------------|-----------|
|                    |                     |               |              | Evaluated                              | Exposure Limit |           |
| 13.56              | 64.22               | -30.98        | 0.000798     | 0.00025                                | 0.9789         | 0.0002595 |

Note:

1. The minimum separation distance (between the person and the antenna / radiating structure) R=5mm.
2. Limit refer to 47 CFR 1.1310(e)(1) table 1.
3. EIRP=0.000798<1mW, when NFC transmitting, there are simultaneously operating transmitters (BT or BLE). Then Option A is not applicable, MPE-based is applicable.

#### BT & BLE

| Description | Frequency<br>GHz | Conducted<br>Power<br>dBm | Gain<br>dBi | Tune-up<br>dB | ERP<br>mW | ERP <sub>th</sub><br>mW | Ratio    |
|-------------|------------------|---------------------------|-------------|---------------|-----------|-------------------------|----------|
| BT          | 2.402            | 4.25                      | -0.58       | ±1.0          | 1.79      | 2.79                    | 0.640854 |
| BLE         | 2.402            | 4.82                      | -0.58       | ±1.0          | 2.04      | 2.79                    | 0.730733 |

Note:

1. Option B is applicable
2. According to the EUT characteristic, BT and BLE cannot transmit simultaneously.

### Simultaneous Transmissions

| Description | Calculation | Limit |
|-------------|-------------|-------|
| NFC + BLE   | 0.7309927   | ≤1.0  |

### Conclusion:

RF Exposure is FCC compliant.

=====End of Report=====