



# RF Exposure Report

## For

**Applicant Name:** INTRO UNION ELECTRONICS CO., LTD  
**Address:** Building C, Lilan Industry Park, Huanguan Middle Road, Longhua District, Shenzhen, China  
**EUT Name:** CAR FM TRANSMITTE  
**Brand Name:** N/A  
**Model Number:** T37  
**Series Model Number:** N/A

## Issued By

**Company Name:** BTF Testing Lab (Shenzhen) Co., Ltd.  
**Address:** F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China

**Report Number:** BTF240815R00103  
**Test Standards:** 47 CFR Part 2 Subpart J Section 2.1091  
**FCC ID:** 2A578-T37  
**Test Conclusion:** Pass  
**Sample receipt date:** 2024-08-15  
**Test Date:** 2024-08-16 to 2024-08-29  
**Date of Issue:** 2024-08-30

**Test By:** Ssxx.guo  
Ssxx.guo/Tester

**Prepared By:** Chris Liu  
Chris Liu / Project Engineer

**Approved By:** Ryan.CJ  
Ryan.CJ / EMC Manager



*Note: All the test results in this report only related to the testing samples. Which can be duplicated completely for the legal use with approval of applicant; it shall not be reproduced except in full without the written approval of BTF Testing Lab (Shenzhen) Co., Ltd., All the objections should be raised within thirty days from the date of issue. To validate the report, you can contact us.*

| Revision History |            |                                                                              |
|------------------|------------|------------------------------------------------------------------------------|
| Version          | Issue Date | Revisions Content                                                            |
| R_V0             | 2024-08-30 | Original                                                                     |
|                  |            |                                                                              |
| Note:            |            | Once the revision has been made, then previous versions reports are invalid. |

## Table of Contents

|     |                                                         |   |
|-----|---------------------------------------------------------|---|
| 1.  | Introduction.....                                       | 4 |
| 1.1 | Identification of Testing Laboratory .....              | 4 |
| 1.2 | Identification of the Responsible Testing Location..... | 4 |
| 1.3 | Laboratory Condition .....                              | 4 |
| 1.4 | Announcement.....                                       | 4 |
| 2.  | Product Information.....                                | 5 |
| 2.1 | Application Information .....                           | 5 |
| 2.2 | Manufacturer Information.....                           | 5 |
| 2.3 | Factory Information .....                               | 5 |
| 2.4 | General Description of Equipment under Test (EUT).....  | 5 |
| 3.  | REQUIREMENT .....                                       | 6 |
| 3.1 | Assessment Result .....                                 | 6 |

## 1. Introduction

### 1.1 Identification of Testing Laboratory

|               |                                                                                                                                     |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Company Name: | BTF Testing Lab (Shenzhen) Co., Ltd.                                                                                                |
| Address:      | F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China |
| Phone Number: | +86-0755-23146130                                                                                                                   |
| Fax Number:   | +86-0755-23146130                                                                                                                   |

### 1.2 Identification of the Responsible Testing Location

|                          |                                                                                                                                                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Location:           | BTF Testing Lab (Shenzhen) Co., Ltd.                                                                                                                                                                               |
| Address:                 | F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China                                                                                |
| Description:             | All measurement facilities used to collect the measurement data are located at F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street, Bao'an District, Shenzhen, China |
| FCC Registration Number: | 518915                                                                                                                                                                                                             |
| Designation Number:      | CN1330                                                                                                                                                                                                             |

### 1.3 Laboratory Condition

|                            |                    |
|----------------------------|--------------------|
| Ambient Temperature:       | 20°C to 25°C       |
| Ambient Relative Humidity: | 45% to 55%         |
| Ambient Pressure:          | 100 kPa to 102 kPa |

### 1.4 Announcement

- (1) The test report reference to the report template version v0.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing, reviewing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) This document may not be altered or revised in any way unless done so by BTF and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (6) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

## 2. Product Information

### 2.1 Application Information

|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| Company Name: | INTRO UNION ELECTRONICS CO., LTD                                                         |
| Address:      | Building C, Lilan Industry Park, Huanguan Middle Road, Longhua District, Shenzhen, China |

### 2.2 Manufacturer Information

|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| Company Name: | INTRO UNION ELECTRONICS CO., LTD                                                         |
| Address:      | Building C, Lilan Industry Park, Huanguan Middle Road, Longhua District, Shenzhen, China |

### 2.3 Factory Information

|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| Company Name: | INTRO UNION ELECTRONICS CO., LTD                                                         |
| Address:      | Building C, Lilan Industry Park, Huanguan Middle Road, Longhua District, Shenzhen, China |

### 2.4 General Description of Equipment under Test (EUT)

|                                            |                                                                                                                                                                                                 |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EUT Name:                                  | CAR FM TRANSMITTE                                                                                                                                                                               |
| Test Model Number:                         | T37                                                                                                                                                                                             |
| Series Model Number:                       | N/A                                                                                                                                                                                             |
| Description of Model name differentiation: | N/A                                                                                                                                                                                             |
| Hardware version                           | T35-AC6926-V1.1                                                                                                                                                                                 |
| Software version                           | N/A                                                                                                                                                                                             |
| Power Supply:                              | DC 12-24V                                                                                                                                                                                       |
| Nominal parameter                          | Input :DC 12-24V<br>USB-C1: 5V/3A, 9V/3A,12V/3.0A, 36W<br>USB-C2:5V/3A, 9V/3A, 12V/3.0A,36W<br>USB-C1+USB-C2 : 5V/3A<br>USB-A1:5V/3A, 9V/2A, 12V/1.5A,18W<br>USB-A2: 5V/2.4A<br>Total : Max 66W |

### 3. Test Requirement

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b), Limits for Maximum Permissible Exposure (MPE),

| Frequency range (MHz)                                   | Electric field strength(V/m) | Magnetic field strength (A/m) | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|---------------------------------------------------------|------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures        |                              |                               |                                     |                          |
| 0.3–3.0                                                 | 614                          | 1.63                          | *(100)                              | 6                        |
| 3.0–30                                                  | 1842/f                       | 4.89/f                        | *(900/f <sup>2</sup> )              | 6                        |
| 30–300                                                  | 61.4                         | 0.163                         | 1.0                                 | 6                        |
| 300–1500                                                | -                            | -                             | f/300                               | 6                        |
| 1500–100,000                                            | -                            | -                             | 5                                   | 6                        |
| (B) Limits for General Population/Uncontrolled Exposure |                              |                               |                                     |                          |
| 0.3–1.34                                                | 614                          | 1.63                          | *(100)                              | 30                       |
| 1.34–30                                                 | 824/f                        | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30–300                                                  | 27.5                         | 0.073                         | 0.2                                 | 30                       |
| 300–1500                                                | -                            | -                             | f/1500                              | 30                       |
| 1500–100,000                                            | -                            | -                             | 1.0                                 | 30                       |

Note: f = frequency in MHz

#### EVALUATION METHOD

Transmission formula:  $Pd = (Pout * G) / (4 * \pi * r^2)$

Where

**Pd** = power density in mW/cm<sup>2</sup>, **Pout** = output power to antenna in mW, **G** = gain of antenna in linear scale;

**Pi** = 3.1416, **R** = distance between observation point and center of the radiator in cm

### 3.1 Assessment Result

☒ Passed ☐ Not Applicable

| Frequency (MHz) | Type   | Conducted Power (dBm) | Maximum Tune-up (dBm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) | Result |
|-----------------|--------|-----------------------|-----------------------|-------------------------------------|-----------------------------|--------|
| 2402            | BT-EDR | 4.32                  | 4.50                  | 0.0009                              | 1.0000                      | Pass   |
| 88.1 – 107.9    | FM     | -44.93                | -44.0                 | 0.000001                            | 1.0000                      | Pass   |

Note: 1.The exposure evaluation safety distance is 20cm.

2.Power (FM) =dBuV/m-92.5=47.57-92.5=-44.93dBm



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**--END OF REPORT--**