

# FCC RF EXPOSURE REPORT

## FCC ID: 2A5LO-ZLTP90

This report concerns: Original Grant

**Project No.** : 2410C237  
**Equipment** : 4G Wireless Router  
**Brand Name** : TOZED KANGWEI  
**Test Model** : ZLT P90  
**Series Model** : ZLT P90Y(Y,Y can be A-J), Telsey P90  
**Applicant** : Tozed Kangwei Tech Co., Ltd  
**Address** : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou,China  
**Manufacturer** : Tozed Kangwei Tech Co., Ltd  
**Address** : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou,China  
**Factory** : Tozed Kangwei Tech Co., Ltd  
**Address** : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou,China  
**Date of Receipt** : Oct. 30, 2024  
**Date of Test** : Nov. 01, 2024 ~ Nov. 27, 2024  
**Issued Date** : Nov. 29, 2024  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG20241030387  
**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091  
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Prepared by :

Edward Li

Edward Li

Approved by :

Treay Chen

Treay Chen

Room 108-116, 309-310, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong, People's Republic of China.

Tel: +86-769-8318-3000

Web: [www.newbtl.com](http://www.newbtl.com)

Service mail: [btl\\_qa@newbtl.com](mailto:btl_qa@newbtl.com)

**REPORT ISSUED HISTORY**

| Report No.          | Version | Description      | Issued Date   | Note  |
|---------------------|---------|------------------|---------------|-------|
| BTL-FCCP-5-2410C237 | R00     | Original Report. | Nov. 29, 2024 | Valid |

## 1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

## 2. ANTENNA SPECIFICATION

For WCDMA:

| Manufacturer                               | Model Name   | Antenna Type | Connector | Gain (dBi) | Note          |
|--------------------------------------------|--------------|--------------|-----------|------------|---------------|
| Shenzhen Be-Comfortable Technology Co. Ltd | N19-0728-R0A | PCB          | N/A       | 4.26       | WCDMA Band II |
|                                            |              |              |           | 4.26       | WCDMA Band IV |
|                                            |              |              |           | 4.66       | WCDMA Band V  |

Note: The antenna gain is provided by the manufacturer.

For LTE:

| Brand                                      | Model Name   | Antenna Type | Connector | Gain (dBi) | Note                       |
|--------------------------------------------|--------------|--------------|-----------|------------|----------------------------|
| Shenzhen Be-Comfortable Technology Co. Ltd | N19-0728-R0A | PCB          | N/A       | 4.26       | LTE Band 2                 |
|                                            |              |              |           | 4.26       | LTE Band 4                 |
|                                            |              |              |           | 4.66       | LTE Band 5                 |
|                                            |              |              |           | 6.23       | LTE Band 7                 |
|                                            |              |              |           | 4.26       | LTE Band 25                |
|                                            |              |              |           | 7.31       | LTE Band 40 (2305-2315MHz) |
|                                            |              |              |           | 7.31       | LTE Band 40 (2350-2360MHz) |
|                                            |              |              |           | 6.23       | LTE Band 41                |
|                                            |              |              |           | 4.88       | LTE Band 42                |
|                                            |              |              |           | 3.72       | LTE Band 48                |

Note: The antenna gain is provided by the manufacturer.

### 3. CALCULATED RESULT

For WCDMA:

| Band    | Frequency (MHz) | Max. Tune up Power (dBm) | Antenna Gain (dBi) | Antenna Gain (linear) | Output Power to Antenna | Power Density (mW/cm <sup>2</sup> ) | Power Density Limit (mW/cm <sup>2</sup> ) | Test Result |
|---------|-----------------|--------------------------|--------------------|-----------------------|-------------------------|-------------------------------------|-------------------------------------------|-------------|
| Band II | 1852.4          | 25                       | 4.26               | 3.6000                | 843.33                  | 0.1678                              | 1.0000                                    | Complies    |
| Band V  | 826.4           | 25                       | 4.26               | 2.6669                | 843.33                  | 0.1679                              | 0.5509                                    | Complies    |
| Band IV | 1712.4          | 25                       | 4.66               | 3.6000                | 843.33                  | 0.1678                              | 1.0000                                    | Complies    |

For LTE:

| Band                    | Frequency (MHz) | Max. Tune up Power (dBm) | Antenna Gain (dBi) | Antenna Gain (linear) | Output Power to Antenna | Power Density (mW/cm <sup>2</sup> ) | Power Density Limit (mW/cm <sup>2</sup> ) | Test Result |
|-------------------------|-----------------|--------------------------|--------------------|-----------------------|-------------------------|-------------------------------------|-------------------------------------------|-------------|
| Band 2                  | 1850.7          | 25                       | 4.26               | 2.6669                | 843.33                  | 0.1678                              | 1.0000                                    | Complies    |
| Band 4                  | 1710.7          | 25                       | 4.26               | 2.6669                | 843.33                  | 0.1678                              | 1.0000                                    | Complies    |
| Band 5                  | 824.7           | 25                       | 4.66               | 2.9242                | 924.70                  | 0.1841                              | 0.5498                                    | Complies    |
| Band 7                  | 2502.5          | 25                       | 6.23               | 4.1976                | 1327.39                 | 0.2641                              | 1.0000                                    | Complies    |
| Band 25                 | 1850.7          | 25                       | 4.26               | 2.6669                | 843.33                  | 0.1678                              | 1.0000                                    | Complies    |
| Band 40 (2305-2315 MHz) | 2307.5          | 25                       | 7.31               | 5.3827                | 1702.16                 | 0.3386                              | 1.0000                                    | Complies    |
| Band 40 (2350-2360 MHz) | 2352.5          | 25                       | 7.31               | 5.3827                | 1702.16                 | 0.3386                              | 1.0000                                    | Complies    |
| Band 41                 | 2498.5          | 25                       | 6.23               | 4.1976                | 1327.39                 | 0.2641                              | 1.0000                                    | Complies    |
| Band 42                 | 3452.5          | 25                       | 4.88               | 3.0761                | 972.75                  | 0.1935                              | 1.0000                                    | Complies    |
| Band 48                 | 3552.5          | 20                       | 3.72               | 2.3550                | 235.50                  | 0.0469                              | 1.0000                                    | Complies    |
| CA_41C                  | 2499.3          | 25                       | 6.23               | 4.1976                | 1327.39                 | 0.2641                              | 1.0000                                    | Complies    |
| CA_42C                  | 3453.3          | 25                       | 4.88               | 3.0761                | 972.75                  | 0.1935                              | 1.0000                                    | Complies    |

Note:

(1) The calculated distance is 20 cm.

**End of Test Report**