

# RF Exposure Evaluation Report

**Product** : 318MHz transmitter  
**Trade mark** : N/A  
**Model/Type reference** : KN-318  
**Serial Number** : N/A  
**Report Number** : EED32R80017902  
**FCC ID** : KUT-KN318  
**Date of Issue** : Jan. 22, 2025  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 1.1310  
47 CFR Part 2.1091  
47 CFR Part 2.1093  
KDB 447498 D04 Interim General RF  
Exposure Guidance v01  
**Test result** : PASS

Prepared for:

**Capital Prospect Ltd**  
**Rm 03, 13/F, Block B, Veristrong Ind Bdg 34-36, Au Pui Wan Street, Fo Tan, NT, Hong Kong**

Prepared by:

**Centre Testing International Group Co., Ltd.**  
**Hongwei Industrial Zone, Bao'an 70 District,**  
**Shenzhen, Guangdong, China**  
**TEL: +86-755-3368 3668**  
**FAX: +86-755-3368 3385**

Compiled by:

*Zhenxia Wen*

Zhenxia Wen

Reviewed by:

*Frazer Li*

Frazer Li

Approved by:

*Aaron Ma*

Aaron Ma

Date:

Jan. 22, 2025



Check No.: 7606030125

1 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | Jan. 22, 2025 | Original    |
|             |               |             |
|             |               |             |

2 Contents

|                                                             | Page |
|-------------------------------------------------------------|------|
| 1 VERSION .....                                             | 2    |
| 2 CONTENTS .....                                            | 3    |
| 3 GENERAL INFORMATION .....                                 | 4    |
| 3.1 CLIENT INFORMATION .....                                | 4    |
| 3.2 GENERAL DESCRIPTION OF EUT .....                        | 4    |
| 3.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD ..... | 4    |
| 3.4 TEST LOCATION .....                                     | 5    |
| 3.5 DEVIATION FROM STANDARDS .....                          | 5    |
| 3.6 ABNORMALITIES FROM STANDARD CONDITIONS .....            | 5    |
| 3.7 OTHER INFORMATION REQUESTED BY THE CUSTOMER .....       | 5    |
| 4 SAR EVALUATION .....                                      | 6    |
| 4.1 RF EXPOSURE COMPLIANCE REQUIREMENT .....                | 6    |
| 4.1.1 Limits .....                                          | 6    |
| 4.1.2 Test Procedure .....                                  | 6    |
| 4.1.3 EUT RF Exposure Evaluation .....                      | 7    |

### 3 General Information

#### 3.1 Client Information

|                          |                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------|
| Applicant:               | Capital Prospect Ltd                                                                     |
| Address of Applicant:    | Rm 03, 13/F, Block B, Veristrong Ind Bdg 34-36, Au Pui Wan Street, Fo Tan, NT, Hong Kong |
| Manufacturer:            | Capital Prospect Ltd                                                                     |
| Address of Manufacturer: | Rm 03, 13/F, Block B, Veristrong Ind Bdg 34-36, Au Pui Wan Street, Fo Tan, NT, Hong Kong |

#### 3.2 General Description of EUT

|                 |                    |
|-----------------|--------------------|
| Product Name:   | 318MHz Transmitter |
| Model No.(EUT): | KN-318             |
| Trade Mark:     | N/A                |

#### 3.3 Product Specification subjective to this standard

|                       |                                |         |
|-----------------------|--------------------------------|---------|
| Frequency Range:      | 318MHz                         |         |
| Modulation Type:      | OOK                            |         |
| Test Power Grade:     | Default                        |         |
| Antenna Type:         | Integral Antenna               |         |
| Power Supply:         | Battery:                       | DC 1.5V |
| Sample Received Date: | Jan. 08, 2025                  |         |
| Sample tested Date:   | Jan. 08, 2025 to Jan. 11, 2025 |         |

### 3.4 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

### 3.5 Deviation from Standards

None.

### 3.6 Abnormalities from Standard Conditions

None.

### 3.7 Other Information Requested by the Customer

None.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 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.

#### 4.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

**4.1.3 EUT RF Exposure Evaluation****For Stand alone:**

| Frequency<br>(MHz) | Estimation<br>distance<br>(mm) | Max. E-field<br>strength<br>(dBuV/m) | EIRP<br>(dBm) | ERP<br>(dBm) | ERP<br>(mW) | Limit<br>(mW) | Result |
|--------------------|--------------------------------|--------------------------------------|---------------|--------------|-------------|---------------|--------|
| 318                | <5                             | 71.66                                | -23.57        | -25.72       | 0.0027      | 22            | Pass   |

**Note:**

① EIRP=conducted power+antenna gain;

② ERP=EIRP-2.15;

③ EIRP(dBm) = Field strength of the fundamental signal(dBuV/m@3m) - 95.23;

④ ERP(mW) =  $10^{(ERP \text{ (dBm)}/10)}$ ;

⑤ The estimation distance is &lt;5mm;

⑥ The test data please refer to the report of EED32R80017901 and only the worst case data was recorded in the report.

⑦ According to KDB 447498 D01 v06, Appendix A, SAR Test Exclusion Threshold for &lt; 5mm test distance is 22mW for fundamental frequency between 300 - 450MHz.

## 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;
5. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*