

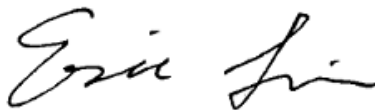
## 1 Cover Page

# RF MPE REPORT

**Application No.:** KSCR2205000769AT  
**FCC ID:** WBKRU4370  
**Applicant:** BTI Wireless  
**Address of Applicant:** 6185 Phyllis Drive #D, Cypress, California 90630, United States  
**Manufacturer:** BTI Wireless  
**Address of Manufacturer:** 6185 Phyllis Drive #D, Cypress, California 90630, United States  
**Factory:** Sunwave Communications Co., Ltd  
**Address of Factory:** 581 Huoju Avenue, Binjiang District Hangzhou China  
**Equipment Under Test (EUT):**  
**EUT Name:** Remote Radio Unit  
**Model No.:** RU4370  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2022-05-20  
**Date of Test:** 2022-06-26 to 2022-08-05  
**Date of Issue:** 2022-08-09

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Eric Lin  
EMC Lab Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2022-08-09	/

Authorized for issue by:			
		Damon Zhou	
		Damon Zhou / Project Engineer	
		Eric Lin	
		Eric Lin / Reviewer	



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### 3 General Information

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

Power supply:	DC 48V
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#### 3.2 Technical Specifications

Frequency Band:	3550MHz-3700MHz
Antenna Type:	External
Antenna Gain:	15dBi (Provided by manufacturer)
Modulation Type:	5G NR: CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
MIMO:	4T4R MIMO, SISO
Temperature Range:	-40℃ to 55℃

**Note:**

The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.



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### 3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

### 3.4 Test Facility

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

- **CNAS (No. CNAS L4354)**

CNAS has accredited Compliance Certification Services (Kunshan) Inc. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

Designation Number: CN1172.

- **ISED (CAB identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No.: 1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.



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## 4 Test Standards and Limits

### 4.1 FCC Radiofrequency radiation exposure limits:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
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: 5G N48 is 1mW/cm<sup>2</sup>.



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## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR220500076901.

### 5.2 MPE Calculation

According to the formula  $S=P/4\pi R^2$ , we can calculate S which is MPE.

Note:

1) P (mW)

2) R = distance to the center of radiation of antenna (in centimeter)

3) MPE limit = 1mW/cm<sup>2</sup>

Test Mode	Frequency Band (MHz)	Maximum E.I.R.P (dBm)	Limit of Power Density S(mW/cm <sup>2</sup> )	Safety Distance (cm)
5G NR Band n48	3550 ~ 3700	55.45	1	167.1

According to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

--End of the Report--



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