

Report No.: KSCR221000194302

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1 Cover Page

RF MPE REPORT

Application No.: KSCR2210001943AT

FCC ID: WBKCPX80P
Applicant: BTI Wireless

Address of Applicant: 14600 Industry Circle La Mirada, CA 90638

Manufacturer: BTI Wireless

Address of Manufacturer: 14600 Industry Circle La Mirada, CA 90638

Factory: Sunwave Communications Co., Ltd.

Address of Factory: 581 Huoju Avenue, Binjiang District, Hangzhou, China

Equipment Under Test (EUT):

EUT Name: 5G CPE **Model No.:** CPX80P

Standard(s): FCC Rules 47 CFR §2.1091

KDB447498 D01 General RF Exposure Guidance v06

Date of Receipt: 2022-10-17

Date of Test: 2022-10-17 to 2022-11-09

Date of Issue: 2022-11-18

Test Result: Pass*

Eric Lin EMC Lab Manager

Tom fin



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^{*} In the configuration tested, the EUT complied with the standards specified above.



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Revision Record						
Version Description		Date	Remark			
00	Original	2022-11-18	1			

Authorized for issue by:	
	cloudpeng
	Cloud Peng / Project Engineer
	Enie Li
	Eric Lin / Reviewer



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3 General Information

3.1 General Description of E.U.T.

	DC 24V/1A,24W by Adapter
Power supply:	Adapter Model:ASSA67A-240100
Power supply:	Input:100-240V~50/60Hz,0.8A
	Output: DC 24V 1A

3.2 Technical Specifications

Frequency Band:	n48,n78
Antenna Type:	Internal
Antonno Coin	Antenna 1:14.32dBi (Provided by manufacturer)
Antenna Gain:	Antenna 2:14.35dBi (Provided by manufacturer)
Modulation Type:	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Antenna Delivery:	2T2R MIMO
Temperature Range:	-30℃ to 50℃

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.

Note:

- 1.SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
- 2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).

3.4 Test Facility

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

CNAS

Compliance Certification Services (Kunshan) Inc. is accredited by the China National Accreditation Service for Conformity Assessment (CNAS). Registration No. CNAS L4354

A2LA

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

• FCC

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

• ISED

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

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/cm²)	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/f2)	30	
30-300	27.5	0.073	0.2	30	
300-1500	/	/	f/1500	30	
1500-100,000	/	/	1.0	30	



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5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR221000194301AT

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/cm²

Test Mode	Frequency Band (MHz)	Max EIRP (dBm)	Operation Distance R(cm)	Power Density (mW/cm2)	Limit of Power Density S(mW/cm2)	Result
5G NR N48	3550~3700	39	26	0.935	1	Pass
5G NR N78	3550~3700	39	26	0.935	1	Pass

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

-- End of the Report--



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