

# RF EXPOSURE EVALUATION REPORT

**Application No.:** SZCR2311003695AT  
**Applicant:** Comba Telecom Network Systems Limited  
**Address of Applicant:** Flat/Rm 10, 3/F, Bio-Informatics Ctr, 2 Science Park West Avenue, HK Science Park, Pak Shek Kok HongKong 510663 China  
**Manufacturer:** Comba Network Systems Company Limited  
**Address of Manufacturer:** No.10 Shenzhou Road, Guangzhou Science City, Guangzhou 510663, Guangdong, P.R.China  
**Factory:** Comba Telecom Technology (Guangzhou) Ltd.  
**Address of Factory:** No.6 Jinbi Road, Economics and Technology Development District, Guangdong, China

**Equipment Under Test (EUT):**  
**EUT Name:** Distributed Unit  
**Model No.:** PRU1001  
**Trade Mark:** Comba  
**FCC ID:** PX8PRU1001  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB 447498 D04 interim General RF Exposure Guidance v01

**Date of Receipt:** 2023-11-20  
**Date of Evaluation:** 2023-11-22 to 2023-11-24  
**Date of Issue:** 2023-11-27

**Evaluation Result:**

**Pass\***

\* In the configuration evaluated, the EUT complied with the standards specified above.



Keny Xu  
EMC Laboratory Manager



Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-11-27		Original

<b>Authorized for issue by:</b>			
		<i>Vincent Chen</i>	
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		<i>Eric Fu</i>	
		<b>Eric Fu/Reviewer</b>	



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### 3 General Information

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

Product Type:	<input type="checkbox"/> Portable device
	<input checked="" type="checkbox"/> Mobile device
	<input type="checkbox"/> Fixed device

#### 3.2 Details of E.U.T.

Power supply:	DC48V
EUT Type:	Base Station
Category of EUT:	Category A
Operation Frequency Band:	n48 (3550-3700MHz)
Test Mode:	TM1.1, TM3.1, TM3.1a, TM3.2
Modulation Type:	DFT-s-OFDM PI/2BPSK, DFT-s-OFDM QPSK, DFT-s-OFDM 16QAM, DFT-s-OFDM 64QAM, DFT-s-OFDM 256QAM
Support Channel Bandwidth:	80MHz, 100MHz
Transmission (TX) and Receiving (RX) Antenna Ports:	4*4
MIMO supported	4T4R MIMO
Antenna Type:	PIFA Antenna
Antenna Gain:	4dBi
Hardware version:	ENB51_A0RFRV01.20230411C
Software version:	ENB-5125D16R_AV03.00.07.01_00.05

Note:

(1) 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.

#### 3.3 Separation Distance

Minimum test separation distance:	20cm
Remark: This minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.	



### 3.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

### 3.5 Test Facility

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

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• **VCCI (Member No. 1937)**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1336**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

### 3.6 Deviation from Standards

None

### 3.7 Abnormalities from Standard Conditions

None





## 4 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)
<b>Limits for General Population/Uncontrolled Exposure</b>				
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



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## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report SZCR231100369501 and Tune up procedure.

Antenna Gain: 4dBi

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)	MIMO Max Conducted power (dBm)	MIMO Max E.I.R.P (dBm)	Operation Distance R(cm)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density S(mW/cm <sup>2</sup> )	Result
N48	3550-3700	30	34	20	0.4993	1.00	Pass

--End of the Report--



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