

# TEST REPORT

Report No. .... : CHTW24100058

Report verification:




Project No. .... : SHT2403013601W

FCC ID ..... : 2AE6C-EN8000U1

Applicant's name ..... : Shenzhen Excera Technology Co., Ltd.

Address..... : 201, Building B, Tongfang Information Harbour, No.11 Langshan Road, Nanshan District, Shenzhen 518057, P.R.China

Product name..... : Voice Ad Hoc Base Station

Trade Mark ..... : 

Model No. .... : EN8000

Listed Model(s) ..... : -

Standard ..... : FCC CFR Title 47 Part 2.1091

Date of receipt of test sample..... : May.15, 2024

Date of testing..... : May.16, 2024 - Aug.01, 2024

Date of issue..... : Oct.18, 2024

Result..... : PASS

Compiled by

(Position-Printed name-Signature) : File administrators Caspar Chen



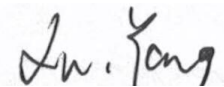
Supervised by

(Position-Printed name-Signature) : Project Engineer Caspar Chen



Approved by

(Position-Printed name-Signature) : RF Manager Xu Yang



Testing Laboratory Name ..... : Shenzhen Huatongwei International Inspection Co., Ltd.

Address..... : Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China

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*The test report merely correspond to the test sample.*

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# 1 TEST STANDARDS AND REPORT VERSION

## 1.1. Test standard

The tests were performed according to following standards:

[FCC 47 Part 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices.

[FCC 47 Part 1.1310](#): Radiofrequency radiation exposure limits.

[FCC 47 Part 1.1307\(b\)](#): Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

[KDB 447498 D04 Interim General RF Exposure Guidance v01](#): Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies

## 1.2. Report revised information


Revised No.	Date of issued	Description
N/A	2024-10-18	Original

## 2 SUMMARY

### 2.1 Client information

Applicant:	Shenzhen Excera Technology Co., Ltd.
Address:	201, Building B, Tongfang Information Harbour, No.11 Langshan Road, Nanshan District, Shenzhen 518057, P.R.China
Manufacturer:	Shenzhen Excera Technology Co., Ltd.
Address:	201, Building B, Tongfang Information Harbour, No.11 Langshan Road, Nanshan District, Shenzhen 518057, P.R.China

### 2.2 Product description

Main unit information:	
Product name:	Voice Ad Hoc Base Station
Trade mark:	 EXCERA
Model No.:	EN8000
Listed model(s):	-
Power supply:	DC 14.4V from battery
Hardware version:	P
Software version:	1.4.01.39D(4)

### 2.3 Radio Specification Description <sup>\*1</sup>

PMR		
Operation Band:	400MHz~470MHz	
Rated Output Power:	<input checked="" type="checkbox"/> High Power    45W <input checked="" type="checkbox"/> Low Power    5W	
Modulation Type:	Analog Voice:	FM
	Digital Voice/Digital Data:	4FSK
Channel Separation	Analog Voice:	12.5kHz
	Digital Voice/Digital Data:	12.5kHz

## 2.4 Testing laboratory information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Connect information:	Tel: 86-755-26715499 E-mail: <a href="mailto:cs@szhtw.com.cn">cs@szhtw.com.cn</a> <a href="http://www.szhtw.com.cn">http://www.szhtw.com.cn</a>	
Qualifications	Type	Accreditation Number
	FCC Test Firm Registration Number	762235
	FCC Designation Number	CN1181

3 TEST CONDITIONS AND RESULTS

4.1. Limit

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength(V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30–300	61.4	0.163	1.0	6
300–1500	-	-	f/300	6
1500–100,000	-	-	5	6
(B) 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: f = frequency in MHz

EVALUATION METHOD

Transmission formula:  $Pd = (Pout \cdot G)/(4 \cdot \pi \cdot r^2)$

Where

**Pd** = power density in mW/cm<sup>2</sup>, **Pout** = output power to antenna in mW, **G** = gain of antenna in linear scale;  
**Pi** = 3.1416, **R** = distance between observation point and center of the radiator in cm

TEST RESULT

☒ Passed      ☐ Not Applicable

Radio Type	Frequency (MHz)	Conducted Average Power (dBm)*	Maximum Tune-up (dBm)	Duty Cycle	r (m)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
PMR	400.0125	46.4	47.0	50%	0.50	1.309	1.333
PMR	435.0000	46.6	47.0	50%	0.48	1.420	1.450
PMR	469.9875	46.4	47.0	50%	0.46	1.546	1.567

Note:

- 1) r is the distance from observation point to the antenna which is declared by the applicant.
- 2) \*: refer to the RF report.
- 3) Antenna Gain is 2.15dBi.

If the gain of the antenna is 2.15dBi, the separation distance is at least 0.50m from body and the antenna, so meet this standard requirement.

## **4 EXTERNAL AND INTERNAL PHOTOS**

Refer to the test report No.: CHTW24080016