RF Exposure evaluation

Report Reference No..... :	**HTT2025111071F02**
FCC ID..... :	**2BK8J-X22**
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Date of issue ..... :	Jan. 07, 2026
Testing Laboratory Name.....:	**Shenzhen HTT Technology Co.,Ltd.**
Address.....:	1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
Applicant's name.....:	**Shanghai WeihonghangCulture Communication Co., Ltd.**
Address.....:	No. 58 Fumin Branch, Hengsha Township,Chongming District,Shanghai
Standard .....:	**47CFR §1.1310** **47CFR §2.1093** **KDB447498 D01 General RF Exposure Guidance v06**

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Test item description .....:	**True Wireless Earphones**
Manufacturer .....:	Shanghai WeihonghangCulture Communication Co., Ltd.
Trade Mark	MGALL
Model/Type reference .....:	X22
Rating .....:	Headphone battery capacity:3.7V/30mAh (polymer battery) Charging bin battery capacity:3.7V/300mAh (polymer battery) Charging interface :USB Type-C
Result .....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	True Wireless Earphones
Model /Type	:	X22
Listed Models	:	N/A
Applicant	**:**	**Shanghai WeihonghangCulture Communication Co., Ltd.**
Address	:	No. 58 Fumin Branch, Hengsha Township,Chongming District,Shanghai
Manufacturer	**:**	**Shanghai WeihonghangCulture Communication Co., Ltd.**
Address	:	No. 58 Fumin Branch, Hengsha Township,Chongming District,Shanghai

Test Result:	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1 TEST STANDARDS

The tests were performed according to following standards:

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
FCC KDB 447498 D01 General RF Exposure Guidance v06: Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.
FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.
FCC CFR 47 part2 2.1093: Radiofrequency radiation exposure evaluation: portable devices

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	Nov. 24, 2025
Testing commenced on	:	Nov. 24, 2025
Testing concluded on	:	Jan. 07, 2026

2.2 Product Description

Product description:	True Wireless Earphones
Model/Type reference:	X22
Power supply:	Headphone battery capacity:3.7V/30mAh (polymer battery) Charging bin battery capacity:3.7V/300mAh (polymer battery) Charging interface :USB Type-C
Adapter Information (Auxiliary test provided by the lab):	Mode: GS-0500200 Input: AC100-240V, 50/60Hz, 0.3A max Output: DC 5V, 2A
Testing sample ID：	HTT2025111071-1# (Engineer sample) HTT2025111071-2# (Normal sample)
Hardware version:	/
Software version:	/
Bluetooth :	
Supported Type:	Bluetooth BR/EDR
Modulation:	GFSK, π/4DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	Chip Antenna
Antenna gain:	2.70 dBi

2.3 Special Accessories

The following is the EUT test of the auxiliary equipment provided by the laboratory:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
/	/	/	/	/	/

2.4 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen HTT Technology Co.,Ltd.
1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

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

FCC-Registration No.: 779513 Designation Number: CN1319
Shenzhen HTT Technology Co.,Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6435.01
Shenzhen HTT Technology Co.,Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

3.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen HTT Technology Co.,Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Shenzhen HTT Technology Co.,Ltd. :

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.12 dB	(1)
Radiated Emission	30~1000MHz	4.37 dB	(1)
Radiated Emission	1~18GHz	5.40 dB	(1)
Radiated Emission	18-40GHz	5.45 dB	(1)
Conducted Disturbance	0.15~30MHz	2.68 dB	(1)
Spectrum bandwidth	/	1.2%	(1)
Output Peak power	30MHz~18GHz	0.57dB	(1)
Time	/	±10%	(1)
Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.			

4 Test limit

4.1 Requirement

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1 Standalone SAR test exclusion considerations: “Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.22 The 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 (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.23 “

[(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] · [√ f (GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- f (GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

4.2 Conducted Power Results

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)	
				ANT1	Limit
GFSK	SISO	2402	DH5	-4.55	<=30
		2441	DH5	-3.98	<=30
		2480	DH5	-4.07	<=30
Pi/4DQPSK	SISO	2402	2DH5	-3.79	<=20.97
		2441	2DH5	-3.33	<=20.97
		2480	2DH5	-3.31	<=20.97
8DPSK	SISO	2402	3DH5	-3.26	<=20.97
		2441	3DH5	-2.62	<=20.97
		2480	3DH5	-2.77	<=20.97

4.3 Manufacturing tolerance

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-4.0	-4.0	-4.0
Tolerance ±(dB)	1.0	1.0	1.0
π/4DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-3.0	-3.0	-3.0
Tolerance ±(dB)	1.0	1.0	1.0
8-DPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-3.0	-3.0	-3.0
Tolerance ±(dB)	1.0	1.0	1.0

4.4 Evaluation Result

Evaluation Results

Band/Mode	f (GHz)	Antenna Distance (mm)	RF output power (including tune-up tolerance)		SAR Test Exclusion Threshold	SAR Test Exclusion
			dBm	mW		
BT	2.450	5	-2.0	0.631	0.1987<3.0	Yes

4.5 Simultaneous Transmission for SAR Exclusion

Not applicable.

5 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 D01v06

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