

RF EXPOSURE Test Report

Report No. : MTi250928006-0105E3

Date of issue : 2025-12-31

Applicant : Shenzhen Xinhui Wireless Intelligence Co., Ltd.

Product : Wireless Charger with Speaker

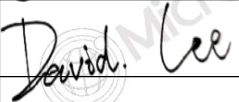
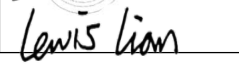
Model(s) : XH-X16, X16S, X16Pro, X16A, X16B, X16C, X16I

FCC ID : 2BHXI-XH-X16

Shenzhen Microtest Co., Ltd.

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Test Result Certification		
Applicant	Shenzhen Xinhui Wireless Intelligence Co., Ltd.	
Applicant Address	B311, Zhongshunyiuan Ind. Park, #436 Fuqian Rd., Fucheng St., Longhua, Shenzhen China	
Manufacturer	Shenzhen Xinhui Wireless Intelligence Co., Ltd.	
Manufacturer Address	311, Building B, Comprehensive building, Zhongshunyiuan Industrial Park, No. 436, Fuqian Road, Jutang Community, Fucheng Street, Longhua District, Shenzhen	
Factory	Shenzhen Xinhui Wireless Intelligence Co., Ltd.	
Factory Address	11, Building B, Comprehensive building, Zhongshunyiuan Industrial Park, No. 436, Fuqian Road, Jutang Community, Fucheng Street, Longhua District, Shenzhen	
Product description		
Product name	Wireless Charger with Speaker	
Trademark	XINHV	
Model name	XH-X16	
Series Model(s)	X16S, X16Pro, X16A, X16B, X16C, X16I	
Standards	47 CFR Part 2.1091	
Test method	KDB 447498 D01 v06	
Testing Information		
Date of test	2025-12-16 to 2025-12-30	
Test Result	Pass	
Prepared by:	James Qin	
Reviewed by:	David Lee	
Approved by:	Lewis Lian	

1 RF EXPOSURE EVALUATION

According to FCC 1.1310: 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 ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			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 ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

P_d = Power density in mW/cm²

P_{out} = output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

π = 3.1415926

R = distance between observation point and center of the radiator in cm(20cm)

P_d the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

2 Measurement Result

BT:

Operation Frequency: 2402-2480MHz,
Power density limited: 1mW/ cm²

Antenna Type: Rod-shaped antenna

Antenna gain: -0.347dBi

R=20cm

$mW=10^{(dBm/10)}$

Antenna gain Numeric= $10^{(dBi/10)}=10^{(-0.347/10)}=0.92$

BT:

Channel Freq. (MHz)	modulation	conducted power	Tune-up power (dBm)	Max		Antenna		Evaluation result (mW/cm ²)	Power density Limits (mW/cm ²)
		(dBm)		tune-up power		Gain			
				(dBm)	(mW)	(dBi)	Numeric		
2402	GFSK	7.22	7±1	8	6.310	-0.347	0.92	0.0012	1
2441		6.43	6±1	7	5.012	-0.347	0.92	0.0009	1
2480		5.89	5±1	6	3.981	-0.347	0.92	0.0007	1
2402	π/4-DQPSK	7.18	7±1	8	6.310	-0.347	0.92	0.0012	1
2441		6.37	6±1	7	5.012	-0.347	0.92	0.0009	1
2480		5.82	5±1	6	3.981	-0.347	0.92	0.0007	1
2402	8DPSK	7.2	7±1	8	6.310	-0.347	0.92	0.0012	1
2441		6.38	6±1	7	5.012	-0.347	0.92	0.0009	1
2480		5.85	5±1	6	3.981	-0.347	0.92	0.0007	1

Conclusion:

BT+WPT=0.0012+0.0307=0.0319

For the max result: $0.0319 \leq 1.0$ for 1g SAR test exclusion threshold, No SAR is required.

Statement

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2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
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5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

***** END OF REPORT *****