

EMC TEST REPORT

Report No.: SET2019-15634

Product: hearing aid

Trade name: /

Model No.: JH-D26(HA70)

Applicant: HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO,LTD

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, Shahe Road, Xili, Nanshan District,

Shenzhen, 518055, P. R. China

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Test Report

Product...: hearing aid

Model No. :: JH-D26(HA70)

Trade name:

Applicant....: HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO,LTD

Applicant Address: FLOOR 6, HUICHENG INDUSTRY BUILDING, NO.9

HUIFENG DONG'ER ROAD ,ZHONGKAI HIGH-TECH

ZONE, HUIZHOU, GUANGDONG, CHINA

Manufacturer: HUIZHOU JINGHAO MEDICAL TECHNOLOGY CO.LTD

Manufacturer Address....: FLOOR 6, HUICHENG INDUSTRY BUILDING, NO.9

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ZONE, HUIZHOU, GUANGDONG, CHINA

Test Standards: **EN 60118-13:2011** Electroacoustics – hearing aids –Part 13:

Electromagnetic compatibility (EMC)

Test Result...: **PASS**

Dec. 20, 2019 **Tested by**:

Reviewed by : Zhao Yanni

Dec. 20, 2019

Dec. 20, 2019



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1 General Information

1.1 Description of EUT

The EUT is a hearing aids.

For a more detailed features description about the EUT, please refer to the manufacture's specification or the User's Manual.

Applicant states the models are JH-D26(HA70), JH-D31, JH-D36, JH-D37, JH-118, JH-119, JH-129. Both of them are identical except the appearance, software functions and geographic differences.

1.2 Objective

Perform Electromagnetic Susceptibility (EMS) tests for IEC standard compliance.

1.3 Test Standards and Results

The EUT has been tested according to EN 60118-13:2011

<u> </u>					
EN 60118-13:2011	Electroacoustics - hearing aids - Part 13: Electromagnetic compatibility				
	(EMC)				

The results are as follow:

IMMUNITY			
Standard	Test Type	Result	
EN 60118-13:2011	Radiated, radio frequency electromagnetic field immunity	PASS	

1.4 List of Equipments Used

Description	Manufacturer	Model No.	Cal. Date	Cal. Due Date	Serial No.
Anechoic Chamber	Albatross	SAC-5MA C(EMC12.8 *6.8*6.4m)	Mar. 25, 2019	Mar. 24, 2023	A0304210
Signal Generator	ROHDE&SCHWARZ	SMB100A	Mar. 22, 2019	Mar. 22, 2020	A1805029 36
Power Amplifier	MILMEGA	80RF1000- 250	Oct. 09, 2017	Oct. 08, 2020	A1409019 25
Power Amplifier	AR	25S1G4AM 1	Oct. 09, 2017	Oct. 08, 2020	A0304248
Ultra wideband antenna	ROHDE&SCHWARZ	HL562	Jul. 14, 2017	Jul. 13, 2020	A0304224
Horn antenna	AR	AT4002A	Nov. 10, 2017	Nov. 09, 2020	

NOTE: Equipments listed above have been calibrated and are in the period of validation.



1.5 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C - Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa



2 Immunity Test			
2.1 Performance Criteria			
IRIL SPL shall not exceed 55 dB SPL.			



2.2 Radiated, Radio Frequency Electromagnetic Field Immunity Test

2.2.1 Test Specification

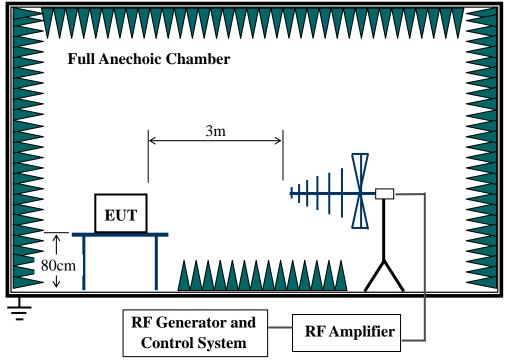
Frequency Range:	800MHz – 960MHz, 1400MHz-2000MHz, 2000MHz-2480MHz		
Field Strength:	Bystander compatibility:3.5V/m(800MHz – 960MHz);		
	2V/m(1400MHz-2000MHz); 1.5V/m(2000MHz-2480MHz)		
Modulation: 1kHz sine wave, 80%, AM modulation			
Frequency Step:	1% of fundamental		
Polarity of Antenna	Horizontal and Vertical		
Test Distance:	3m		
Antenna Height:	1.5m		
Dwell Time:	1 second for 1kHz modulation		

2.2.2 Test Procedure

- a. The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.
- b. The frequency range is swept from 800 MHz -2480MHz with the signal 80% amplitude modulated with sine wave. In order to represent the worst case condition, the modulation frequencies shall be 1 kHz.
- c. The rate of sweep did not exceed 1.5×10 -3 decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- d. The minimum dwell time shall be based upon the time required for the equipment or system to be exercised (if applicable) and adequately respond to the test signal. The dwell time shall be at least 1s for 1kHz modulation, and shall be no less than the respond time of the slowest responding function plus the setting time of the radiated RF immunity test system.
- e. The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.



2.2.3 Test Setup



For the actual test configuration, please refer to Appendix II: Photographs of the Test Configuration.

2.2.4 Test Result

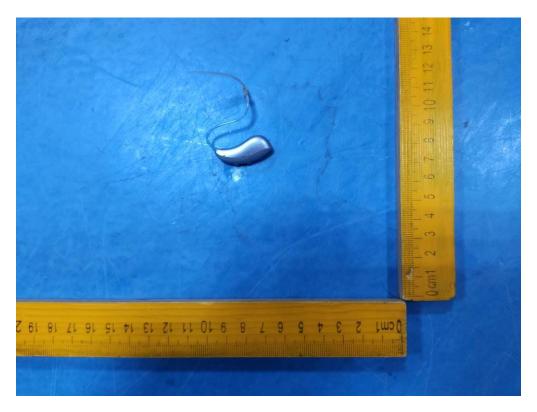
Test Conditions	Polarity	Azimuth	Result(dB)
800-960MHz,	V	0, 90, 180, 270	20.0
3.5V/m 1kHz Sine 80% AM	Н	0, 90, 180, 270	20.0
1400-2000MHz,	V	0, 90, 180, 270	19.3
2V/m 1kHz Sine 80% AM	Н	0, 90, 180, 270	19.5
2000-2480MHz	V	0, 90, 180, 270	19.7
1.5V/m 1kHz Sine 80% AM	Н	0, 90, 180, 270	18.7

The EUT is complied with the Bystander compatibility.



Appendix I: Photographs of the EUT





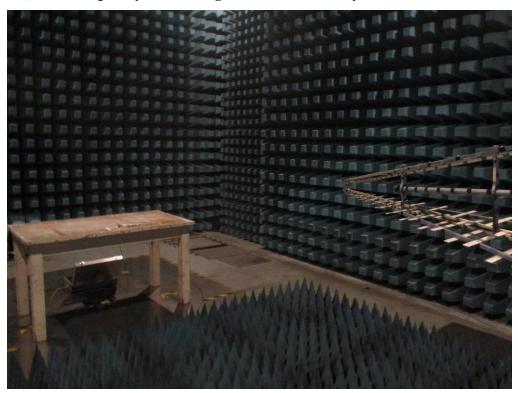


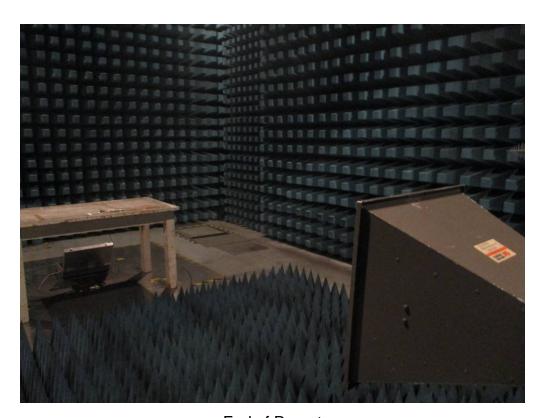




Appendix II: Photographs of the Test Configuration

1. Radiated, radio frequency electromagnetic field immunity





End of Report



STATEMENT

- 1. The test report is invalid without stamp of laboratory.
- 2. The test report is invalid without signature of person(s) testing and authorizing.
- 3. The test report is invalid if erased and corrected.
- 4. Test results of the report is valid to the test samplesif sampling by client.
- 5. " $\stackrel{\wedge}{\bowtie}$ " item to be outside the scope of authorized by CNAS.
- 6. "\times" item to be outside the scope of CMA, the test method, data and results are available for reference..
- 7. The test report shall not be reproduced except in full, without written approval of the laboratory.
- 8. If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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