

FCC TEST REPORT

FCC ID: 2A4VU-G270F-XXX

On Behalf of

iRest Health Science and Technology Co., Ltd.

Spa Massage Chair

Model No.: G270F-XXX, G270-001, G270G-XXX, NS399 VX, NS299VX, G460-10X, G490-X, G270-X, G580-3X, G210H, G260-1X, G450-21X, G450-32X, RX, R2X, OS-Lulu

Prepared for Address	 iRest Health Science and Technology Co., Ltd. No. 1118 Shibali East Road, Daqiao Town, Nanhu District, Jiaxing, China
Prepared By Address	 Shenzhen Alpha Product Testing Co., Ltd. Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China
	Report Number : A2302159-C01-R01

Test Result	:	Pass
Version Number	:	V0
Date of Report	:	July 4, 2024
Date of Test	:	July 1, 2024 – July 4, 2024
Date of Receipt	:	July 1, 2024
Report Number	:	A2302159-C01-R01

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Applicant	:	iRes	t Health Science	e ar	nd Technology Co., Ltd.
Address	:	No. ′	1118 Shibali Eas	st R	oad, Daqiao Town, Nanhu District, Jiaxing,China
Manufacturer	:	iRes	t Health Science	e ar	nd Technology Co., Ltd.
Address	:	No. ′	1118 Shibali Eas	st R	oad, Daqiao Town, Nanhu District, Jiaxing,China
EUT Description	:	Spa	Massage Chair		
		(A)	Model No.	:	G270F-XXX, G270-001, G270G-XXX, NS399 VX, NS299VX, G460-10X, G490-X, G270-X, G580-3X, G210H, G260-1X, G450-21X, G450-32X, RX, R2X, OS-Lulu
		(B)	Trademark	:	iRest

TEST REPORT DECLARATION

Measurement Standard Used:

FCC CFR Title 47 Part 15 Subpart C

FCC KDB 680106 D01 Wireless Transfer v04

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness test. Also, this report shows that the EUT is technically compliant with the KDB 680106 D01 requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature)	Yannis Wen Project Engineer	Yanniz wen
Approved by (name + signature):	Jack Xu Project Manager	Janes
Date of issue	July 4, 2024	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	July 4, 2024	Initial released Issue	Yannis Wen

1. Test Result Summary

Requirement	CFR 47 Section	Result
RF EXPOSURE	§1.1307(b)(1) & KDB680106	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

2. EUT Description

2.1. Description of Device (EUT)					
EUT Name	:	Spa Massage Chair			
Model No.	:	G270F-XXX, G270-001, G270G-XXX, NS399 VX, NS299VX, G460-10X, G490-X, G270-X, G580-3X, G210H, G260-1X, G450-21X, G450-32X, RX, R2X, OS-Lulu			
DIFF	:	Only difference is the appearance and shape, and the wireless part has no difference. So all the test were performed on the model G270F-XXX			
Trademark	:	N/A			
Power supply	:	AC 120V/60Hz			
EUT information	:	Wireless Output: 5W			
Operation frequency	:	110~205KHz			
Modulation	:	MSK			
Antenna Type	:	Coil Antenna, Maximum Gain is 0dBi (This value is supplied by applicant).			
Software version	:	V1.0			
Hardware version	:	V1.0			
Connector cable loss	:	0.5dB (This value is supplied by applicant).			
Intend use environment	:	Residential, commercial and light industrial environment			

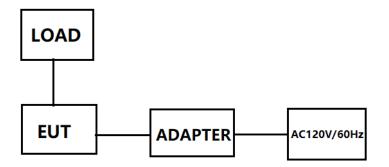
2.2. Accessories of Device (EUT)

Accessories1	:	/
Manufacturer	:	/
Model	:	/
Ratings	:	/

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification
1	Wireless load				

2.4. Block Diagram of Connection between EUT and Simulators



2.5. Description of Test Modes

Channel	Frequency (KHz)
1	128

2.6. Test Conditions

Items	Required	Actual
Temperature range:	15-35 ℃	24 ℃
Humidity range:	25-75%	56%
Pressure range:	86-106kPa	98kPa

2.7. Test Facility

Shenzhen Alpha Product Testing Co., Ltd Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

June 21, 2018 File on Federal Communication Commission Registration Number: 293961

July 15, 2019 Certificated by IC Registration Number: 12135A

2.8. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Uncertainty for H-Field	2.39dB
Uncertainty for E-Field	2.45dB
Uncertainty for conducted RF Power	0.65dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

3. Test Results and Measurement Data

3.1. RF Exposure Test

3.1.1. Test Specification

Test Requirement:	FCC Rules and Regulations KDB680106					
Test Method:	§1.1307(b)(1) & KDB680106					
Limits:	According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. According to §1.1310 and §2.1093 RF exposure is calculated. According KDB680106 D01v03r01: RF Exposure Wireless Charging.					
Test Setup:	B + Field & B-Field Probe					
Test Mode:	Wireless charging load has been charge at no load, middle load and full load. All test modes were pre-tested, but we only recorded the worse case in this report.					
Test Procedure:	 The RF exposure test was performed in shielded chamber The measurement probe was placed at test distance(15cm) which is between the edge of the charger and the geometric centre of probe. The measurement probe used to search of highest strength. The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B,C,D,E,F) were completed. The EUT were measured according to the dictates of KDB 680106 D01 Wireless Transfer v04. 					
Test Result:	PASS					

3.1.2. Test Instruments

Item	Equipment	Manufacturer	Model No.	Firmware version	Serial No.	Last Cal.	Cal Interval
1	Exposure Level Tester	narda	ELT-400	N/A	N-0231	2023.08.22	1Year
2	Magnetic field probe 100cm2	narda	ELT probe 100cm2	N/A	M0675	2023.08.22	1Year
3	Isotropic Electric Field Probe	narda	EP-601	N/A	511WX60706	2023.08.16	1Year

3.1.3. Test data

For Full load mode:

E-Field Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(V/m)	(V/m)
0.110-0.205	1.223	1.098	1.230	1.260	1.153	307	614

H-Filed Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(A/m)	(A/m)
0.110-0.205	0.613	0.613	0.606	0.524	0.709	0.815	1.63

E-Field Strength at 0cm for position C,E from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(V/m)	(V/m)
0.110-0.205	/	/	2.096	/	1.978	307	614

H-Filed Strength at 0cm for position C,E from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(A/m)	(A/m)
0.110-0.205	/	/	0.755	/	0.776	0.815	1.63

For Null load mode:

E-Field Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)		Б	C			(V/m)	(V/m)
· /	A	D	C	D		· · · /	· · ·
0.110-0.205	1.242	1.103	1.231	1.288	1.148	307	614

H-Filed Strength at 15 cm for position A,B,C,D 20cm for position E from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(A/m)	(A/m)
0.110-0.205	0.667	0.557	0.683	0.700	0.584	0.815	1.63

E-Field Strength at 0cm for position C,E from the edges surrounding the EUT (V/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	А	В	С	D	E	(V/m)	(V/m)
0.110-0.205	/	/	1.226	/	1.149	307	614

H-Filed Strength at 0cm for position C,E from the edges surrounding the EUT (A/m)

Frequency	Test	Test	Test	Test	Test	Limit	Limits
Range	Position	Position	Position	Position	Position	(50%)	Test
(MHz)	A	В	С	D	E	(A/m)	(A/m)
0.110-0.205	/	/	0.707	/	0.763	0.815	1.63

4. Photos of test setup

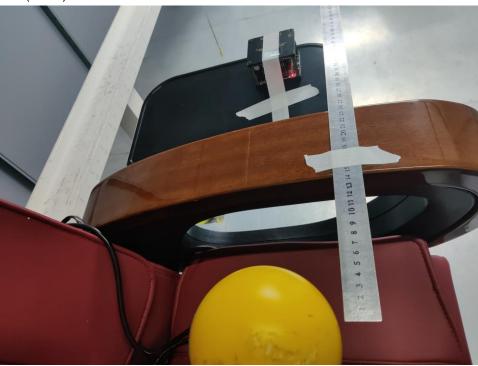
For Full load mode(15cm)



А

For Full load mode(15cm)

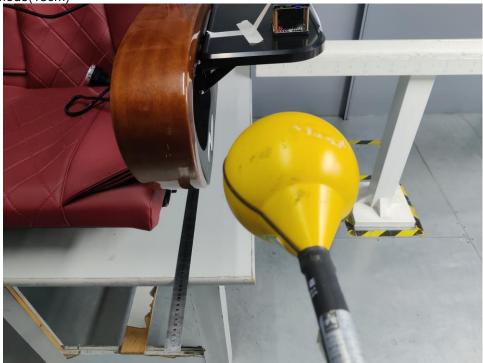




For Full load mode(15cm)

С

For Full load mode(15cm)



D



For Full load mode(20cm)

Е

For Full load mode(0cm)





For Full load mode(0cm)

Е



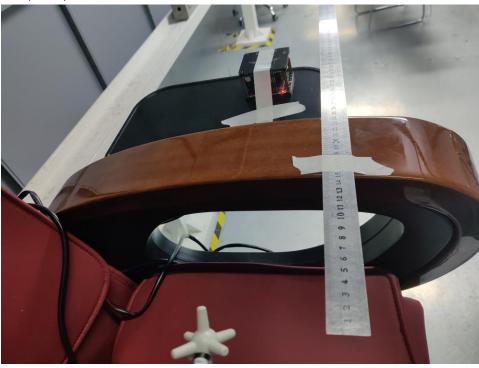
For Full load mode(15cm)

А

For Full load mode(15cm)



В



For Full load mode(15cm)

С

For Full load mode(15cm)



D



For Full load mode(20cm)

Е

For Full load mode(0cm)



С

For Full load mode(0cm)



Е

5. Photographs of EUT

Refer to ANNEX.

-----END OF REPORT-----