Shenzhen Most Technology Service Co., Ltd.
No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.

RF Exposure Evaluation Report

Report Reference No......:	**MTWG22040348-H**
FCC ID..... :	**2A4VU-SL-A200-1**
Compiled by (position+printed name+signature)..:	File administrators Alisa Luo
Supervised by (position+printed name+signature)..:	Test Engineer Sunny Deng
Approved by (position+printed name+signature)..:	Manager Yvette Zhou
Date of issue.....:	**May 06,2022**
Representative Laboratory Name .:	**Shenzhen Most Technology Service Co., Ltd.**
Address .....:	No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China.
Applicant's name.....:	**iRest Health Science and Technology Co., Ltd.**
Address .....:	No.468 Shibali East Road, Daqiao Town, Nanhu District, Jiaxing, Zhejiang, China
Test specification/ Standard .....**:**	**47 CFR Part 1.1307** **47 CFR Part 2.1093**
TRF Originator.....:	Shenzhen Most Technology Service Co., Ltd.

Test item description .....:	Massage Chair
Trade Mark .....:	iRest
Model/Type reference.....:	SL-A200-1
Listed Models .....:	SL-A200-3,SL-A200-8,SL-A200-10,SL-A201-9,SL-A202-2,SL-A202-3,SL-A202-10,SL-A203,Titan 3D Quantum, 3D LTX,SL-A201-3,SL-A201-6,BM-A201,SL-A200,SL-A200-2, SL-A201,SL-A201-2,SL-A201-5,SL-A202
Modulation Type .....:	GFSK, π/4DQPSK, 8DPSK
Operation Frequency.....:	From 2402MHz to 2480MHz
Rating .....:	110-120V~, 60Hz, 90W
Hardware version .....:	V1.1
Software version .....:	V1.0
Result.....:	**PASS**

T E S T R E P O R T

Equipment under Test	:	Massage Chair
Model /Type	:	SL-A200-1
Listed Models	:	SL-A200-3,SL-A200-8,SL-A200-10,SL-A201-9,SL-A202-2,SL-A202-3,SL-A202-10,SL-A203,Titan 3D Quantum, 3D LTX,SL-A201-3,SL-A201-6,BM-A201,SL-A200,SL-A200-2, SL-A201,SL-A201-2,SL-A201-5,SL-A202
Remark	:	The model names are different
Applicant	:	**iRest Health Science and Technology Co., Ltd.**
Address	:	No.468 Shibali East Road, Daqiao Town, Nanhu District, Jiaxing, Zhejiang, China
Manufacturer	:	**iRest Health Science and Technology Co., Ltd.**
Address	:	No.468 Shibali East Road, Daqiao Town, Nanhu District, Jiaxing, Zhejiang, China

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.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2022.05.06	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

According to FCC Part1.1310: 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 part1.1307(b)

TABLE 1—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 Exposures				
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
300–1500	.....	.....	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	*($180/f^2$)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

F= Frequency in MHz
Friis Formula
Friis transmission formula: Pd = (Pout*G)/(4* Pi * R^2) Where
Pd = power density in mW/cm2
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
Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.1.3 EUT RF Exposure

Measurement Data
BLE

GFSK				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.986	-0.986±1	0.014	1.00
Middle(2440MHz)	0.497	0.497±1	1.497	1.41
Highest(2480MHz)	-2.112	-2.112±1	-1.112	0.77

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum Peak Conducted Output Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Highest(2440 MHz)	1.497	1.4	-1.39	0.002	1.0	Pass

Note: 1) Refer to report **MTWG22040348-R2** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(1.4*0.7)/(4*3.1416*202)=0.002
Note: 3)EUT's Bluetooth module is more than 20cm away from the human body.

Measurement Data

BT classic

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	-0.926	-0.926±1	0.074
Middle(2441MHz)	0.611	0.611±1	1.611
Highest(2480MHz)	-2.062	-2.062±1	-1.062

π /4DQPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	-0.957	-0.957±1	0.043
Middle(2441MHz)	0.595	0.595±1	1.595
Highest(2480MHz)	-2.054	-2.054±1	-1.054

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power (dBm)
Lowest(2402MHz)	-0.961	-0.961±1	0.039
Middle(2441MHz)	0.599	0.599±1	1.599
Highest(2480MHz)	-2.065	-2.065±1	-1.062

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum Peak Conducted Output Power (MW)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit	Result
Highest(2441 MHz)	1.611	1.44	-1.39	0.002	1.0	Pass

Note: 1) Refer to report **MTWG22040348-R1** for EUT test Max Conducted average Output Power value.
Note: 2) Pd = (Pout*G)/(4* Pi * R2)=(1.44*0.7)/(4*3.1416*202)=0.002
Note: 3)EUT's Bluetooth module is more than 20cm away from the human body.

.....THE END OF REPORT.....