

APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.

Massage Chair

Model No.: EC-625B, OG 6250

FCC ID: YMX-EC625B

Prepared for : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.
Address : (5/F) NO.168, QIANPU ROAD SIMING DISTRICT, XIAMEN, CHINA.
Prepared by : Shenzhen Accurate Technology Co., Ltd.
Address : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

Tel: (0755) 26503290
Fax: (0755) 26503396

Report No. : ATE20172210
Date of Test : Nov. 09, 2017-Dec. 04, 2017
Date of Report : Dec. 05, 2017

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Test Report Certification

Applicant : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO.,LTD.
Address : (5/F) NO.168, QIANPU ROAD SIMING DISTRICT,
XIAMEN, CHINA
Manufacturer : XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO.,LTD.
Address : (5/F) NO.168, QIANPU ROAD SIMING DISTRICT,
XIAMEN, CHINA
Product : Massage Chair
Model No. : EC-625B, OG 6250
Trade name : n.a

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247: 2017
ANSI C63.10: 2013

The EUT was tested according to DTS test procedure of Apr 05, 2017 KDB558074 D01 DTS Meas Guidance v04 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : Nov. 09, 2017-Dec. 04, 2017
Date of Report: Dec. 05, 2017

Prepared by :



(Tim Zhang, Engineer)

Approved & Authorized Signer :


(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT	:	Massage Chair
Model Number	:	EC-625B, OG 6250
Bluetooth version	:	BT V4.0 LE
Frequency Range	:	2402MHz-2480MHz
Number of Channels	:	40
Antenna Gain	:	2dBi
Antenna type	:	PCB Antenna
Power Supply	:	AC 120V/60Hz
Modulation mode	:	GFSK
Applicant	:	XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO.,LTD.
Address	:	(5/F) NO.168, QIANPU ROAD SIMING DISTRICT, XIAMEN, CHINA
Manufacturer	:	XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO.,LTD.
Address	:	(5/F) NO.168, QIANPU ROAD SIMING DISTRICT, XIAMEN, CHINA
Date of sample received	:	Nov. 09, 2017
Date of Test	:	Nov. 09, 2017-Dec. 04, 2017

1.2.Carrier Frequency of Channels

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

1.3.Special Accessory and Auxiliary Equipment

PC Manufacturer: LENOVO
M/N: 4290-RT8
S/N: R9-FW93G 11/08

1.4. Description of Test Facility

EMC Lab	: Recognition of accreditation by Federal Communications Commission (FCC) The Designation Number is CN1189 The Registration Number is 708358
	Listed by Innovation, Science and Economic Development Canada (ISED) The Registration Number is 5077A-2
	Accredited by China National Accreditation Service for Conformity Assessment (CNAS) The Registration Number is CNAS L3193
	Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01
Name of Firm	: Shenzhen Accurate Technology Co., Ltd.
Site Location	: 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

1.5.Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty = 3.08dB, k=2
(9kHz-30MHz)

Radiated emission expanded uncertainty (30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty = 4.06dB, k=2
(Above 1GHz)

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 07, 2017	Jan. 06, 2018
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 07, 2017	Jan. 06, 2018
Spectrum Analyzer	Rohde&Schwarz	FSV-40	101495	Jan. 07, 2017	Jan. 06, 2018
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 07, 2017	Jan. 06, 2018
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 07, 2017	Jan. 06, 2018
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 13, 2017	Jan. 12, 2018
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 13, 2017	Jan. 12, 2018
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 13, 2017	Jan. 12, 2018
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 13, 2017	Jan. 12, 2018
Open Switch and Control Unit	Rohde&Schwarz	OSP120 + OSP-B157	101244 + 100866	Jan. 07, 2017	Jan. 06, 2018
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 07, 2017	Jan. 06, 2018
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 07, 2017	Jan. 06, 2018
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 07, 2017	Jan. 06, 2018
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 07, 2017	Jan. 06, 2018

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

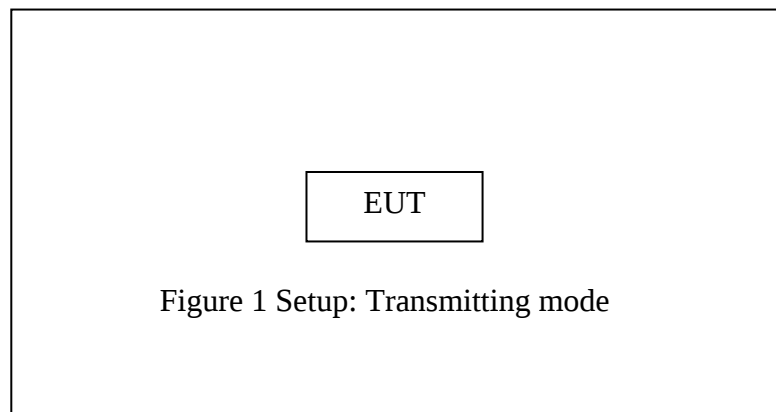
The mode is used: **BLE Transmitting mode**

Low Channel: 2402MHz

Middle Channel: 2440MHz

High Channel: 2480MHz

3.2.Configuration and peripherals

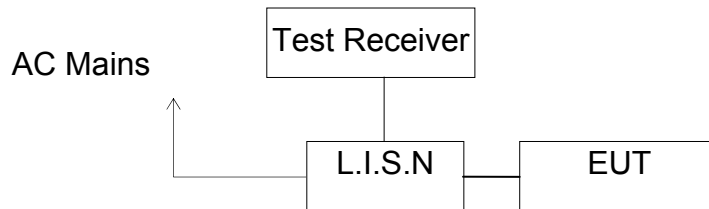


4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. POWER LINE CONDUCTED MEASUREMENT

5.1. Block Diagram of Test Setup



(EUT: Massage Chair)

5.2. Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0

NOTE1: The lower limit shall apply at the transition frequencies.
 NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

5.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in test mode and measure it.

5.5. Test Procedure

The EUT is put on the plane 0.1 m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

5.6. DATA SAMPLE

Frequency (MHz)	Quasi Peak Level (dB μ V)	Average Level (dB μ V)	Transducer value (dB)	Quasi Peak Result (dB μ V)	Average Result (dB μ V)	Quasi Peak Limit (dB μ V)	Average Limit (dB μ V)	Quasi Peak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XX 29.4	18.3	11.1	40.5	29.4	56.0	56.0		15.5	16.6	Pass

Transducer value = Insertion loss of LISN + Cable Loss

Result = Quasi-peak Level/Average Level + Transducer value

Limit = Limit stated in standard

Calculation Formula:

Margin = Limit – Reading level value – Transducer value

5.7.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Test mode : BT Operation(worse case)								
Test Voltage: 120V/60Hz								
MEASUREMENT RESULT: "CM-0808-03_fin"								
8/8/2017 10:57AM								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.150000	45.40	10.5	66	20.6	QP	N	GND	
0.641450	33.50	10.8	56	22.5	QP	N	GND	
2.082610	27.00	11.0	56	29.0	QP	N	GND	
2.522471	31.10	11.0	56	24.9	QP	N	GND	
9.646144	34.50	11.3	60	25.5	QP	N	GND	
13.816176	31.90	11.4	60	28.1	QP	N	GND	
MEASUREMENT RESULT: "CM-0808-03_fin2"								
8/8/2017 10:57AM								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.359562	23.30	10.6	49	25.4	AV	N	GND	
0.646592	29.40	10.8	46	16.6	AV	N	GND	
2.082610	22.90	11.0	46	23.1	AV	N	GND	
2.462770	24.50	11.0	46	21.5	AV	N	GND	
9.455514	27.20	11.3	50	22.8	AV	N	GND	
13.328598	22.70	11.3	50	27.3	AV	N	GND	
MEASUREMENT RESULT: "CM-0808-04_fin"								
8/8/2017 11:00AM								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.150000	45.40	10.5	66	20.6	QP	L1	GND	
0.644016	33.20	10.8	56	22.8	QP	L1	GND	
2.116132	27.00	11.0	56	29.0	QP	L1	GND	
2.522471	31.70	11.0	56	24.3	QP	L1	GND	
9.531310	32.70	11.3	60	27.3	QP	L1	GND	
12.858226	31.30	11.3	60	28.7	QP	L1	GND	
MEASUREMENT RESULT: "CM-0808-04_fin2"								
8/8/2017 11:00AM								
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE	
0.318980	23.80	10.6	50	25.9	AV	L1	GND	
0.644016	32.70	10.8	46	13.3	AV	L1	GND	
2.099304	23.30	11.0	46	22.7	AV	L1	GND	
2.338222	27.50	11.0	46	18.5	AV	L1	GND	
9.121825	24.60	11.3	50	25.4	AV	L1	GND	
12.858226	23.50	11.3	50	26.5	AV	L1	GND	

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

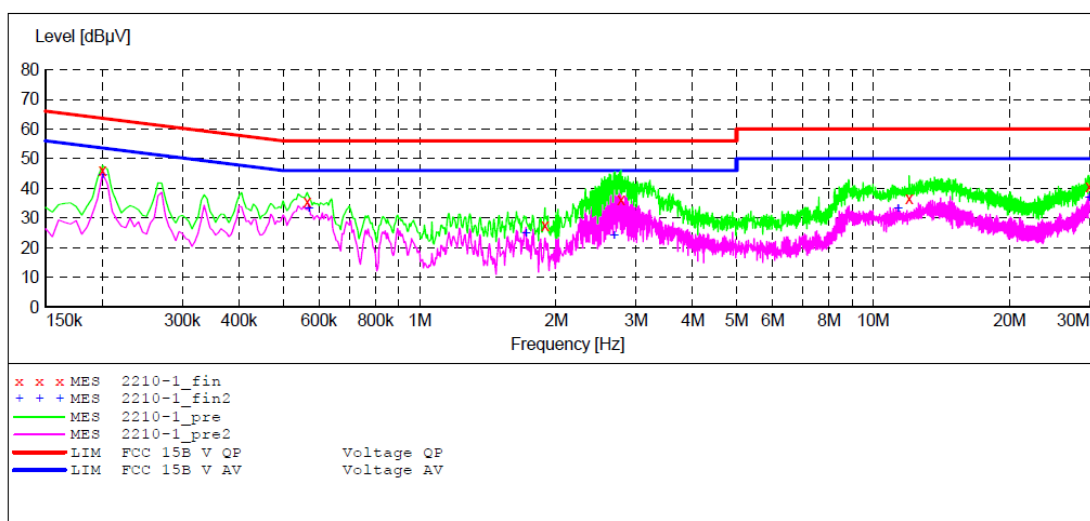
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Message Chair M/N:EC-625B
 Manufacturer: XIAMEN COMFORT SCIEN&TECHNOLOGY GROUP CO.,LTD
 Operating Condition: BT OPERATION
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: L 120V/60Hz
 Comment: Report NO.:ATE20172210
 Start of Test: 11/16/2017 / 4:21:40PM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "2210-1_fin"

11/16/2017 4:24PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.200000	46.10	10.5	64	17.5	QP	L1	GND
0.565000	35.50	10.7	56	20.5	QP	L1	GND
1.890000	27.40	11.0	56	28.6	QP	L1	GND
2.780000	36.20	11.0	56	19.8	QP	L1	GND
12.010000	36.50	11.3	60	23.5	QP	L1	GND
29.905000	40.60	11.5	60	19.4	QP	L1	GND

MEASUREMENT RESULT: "2210-1_fin2"

11/16/2017 4:24PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.200000	44.70	10.5	54	8.9	AV	L1	GND
0.570000	33.30	10.7	46	12.7	AV	L1	GND
1.715000	24.80	10.9	46	21.2	AV	L1	GND
2.680000	24.10	11.0	46	21.9	AV	L1	GND
11.350000	33.20	11.3	50	16.8	AV	L1	GND
29.965000	36.80	11.5	50	13.2	AV	L1	GND

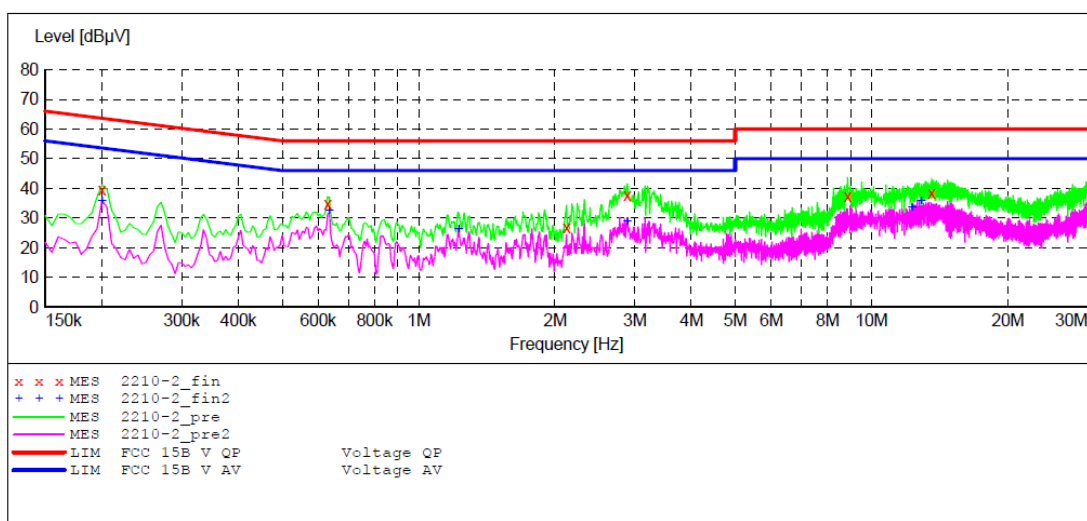
ACCURATE TECHNOLOGY CO.,LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Message Chair M/N:EC-625B
 Manufacturer: XIAMEN COMFORT SCIEN&TECHNOLOGY GROUP CO.,LTD
 Operating Condition: BT OPERATION
 Test Site: 1#Shielding Room
 Operator: Frank
 Test Specification: N 120V/60Hz
 Comment: Report NO.:ATE20172210
 Start of Test: 11/16/2017 / 4:25:36PM

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "2210-2_fin"

11/16/2017 4:28PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.200000	39.50	10.5	64	24.1	QP	N	GND
0.630000	34.90	10.8	56	21.1	QP	N	GND
2.120000	26.90	11.0	56	29.1	QP	N	GND
2.890000	37.80	11.0	56	18.2	QP	N	GND
8.850000	37.30	11.3	60	22.7	QP	N	GND
13.570000	38.60	11.3	60	21.4	QP	N	GND

MEASUREMENT RESULT: "2210-2_fin2"

11/16/2017 4:28PM

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.200000	35.80	10.5	54	17.8	AV	N	GND
0.635000	32.70	10.8	46	13.3	AV	N	GND
1.225000	26.40	10.9	46	19.6	AV	N	GND
2.890000	28.90	11.0	46	17.1	AV	N	GND
12.280000	33.70	11.3	50	16.3	AV	N	GND
12.880000	35.90	11.3	50	14.1	AV	N	GND

6. 6DB BANDWIDTH MEASUREMENT

6.1. Block Diagram of Test Setup



(EUT: Massage Chair)

6.2. The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

6.3. EUT Configuration on Measurement

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

6.5. Test Procedure

6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

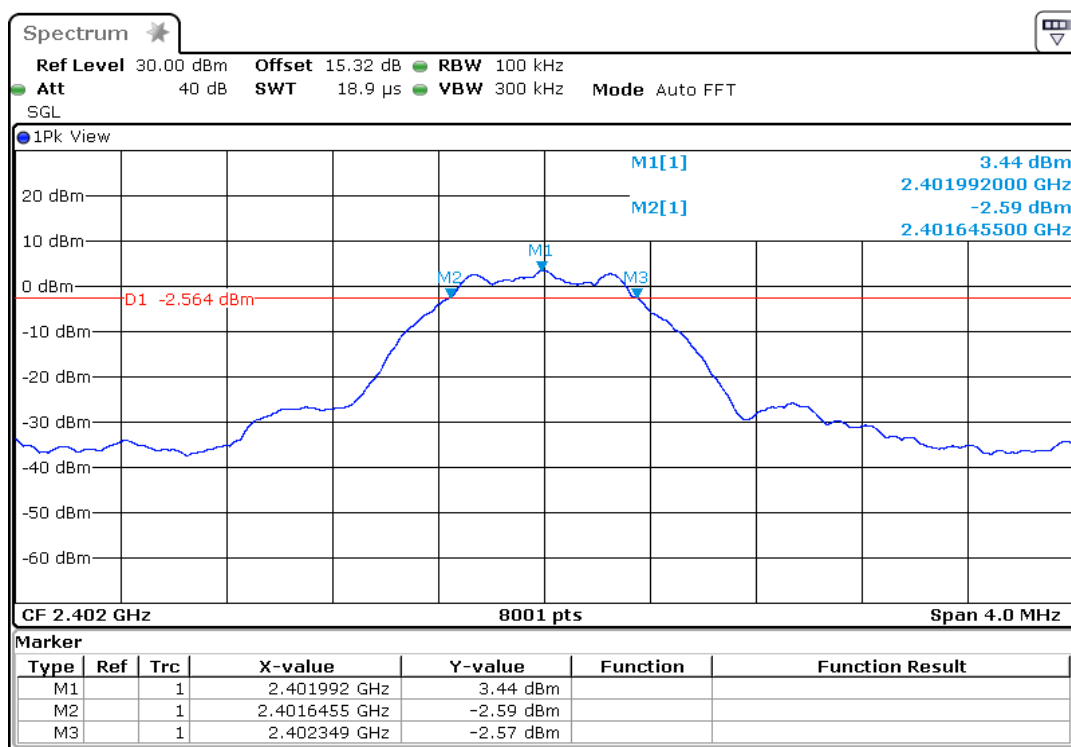
6.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

6.6.Test Result

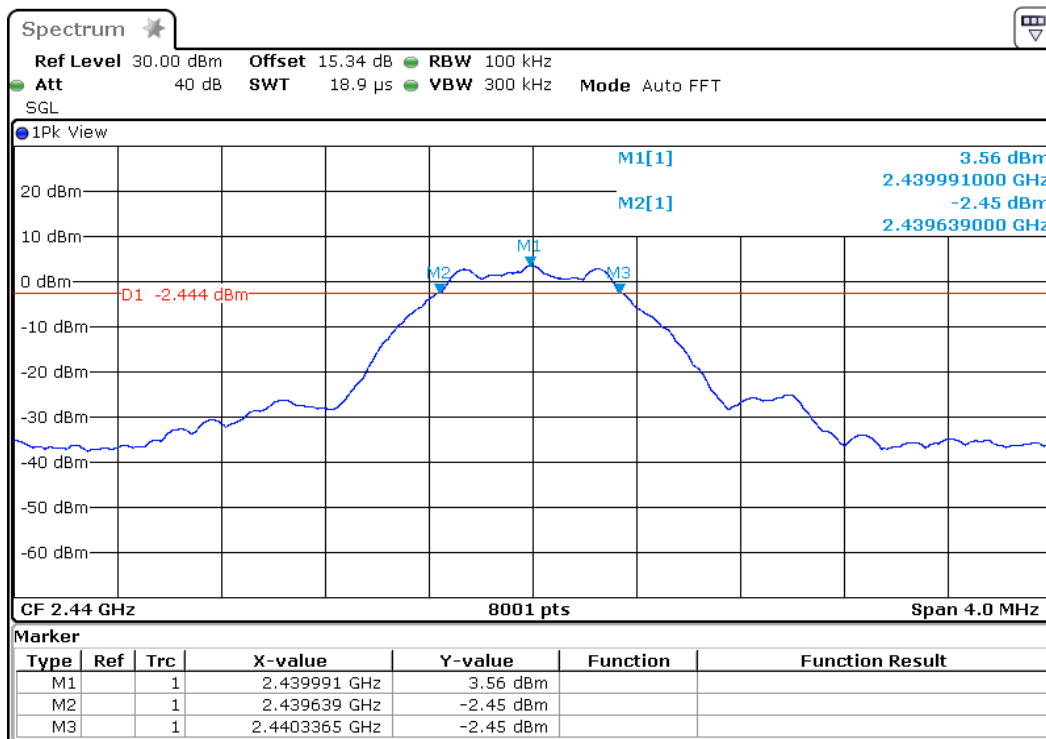
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit(MHz)	PASS/FAIL
0	2402	0.704	0.5	PASS
19	2440	0.697	0.5	PASS
39	2480	0.686	0.5	PASS

The spectrum analyzer plots are attached as below.

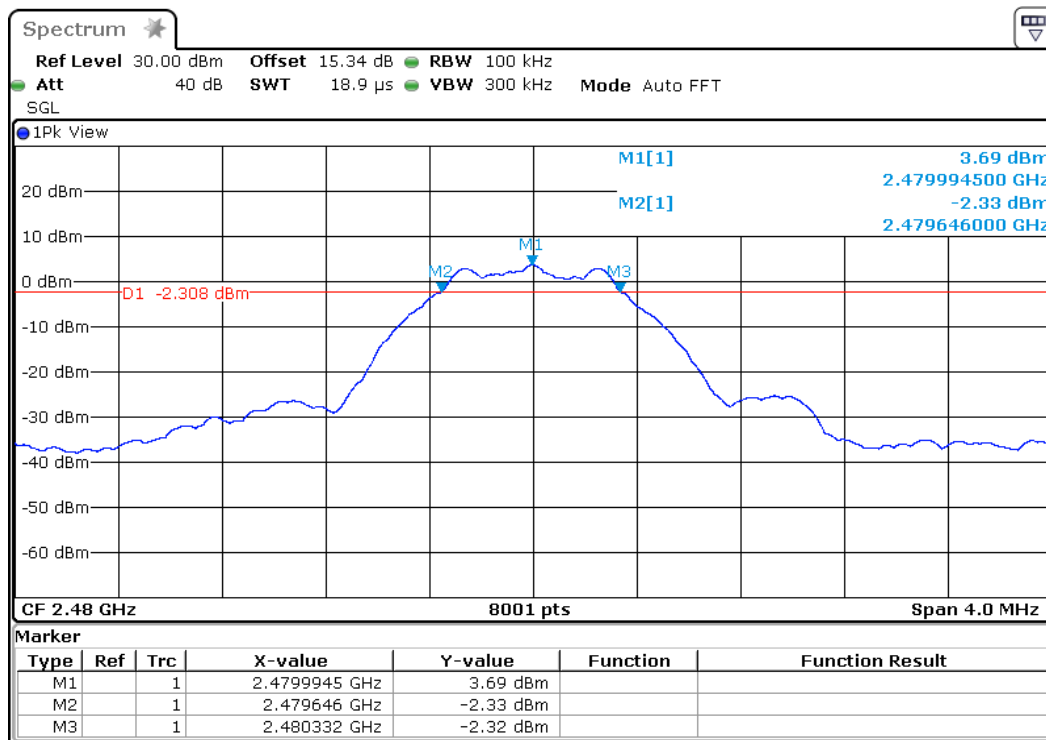
channel 0



channel 19

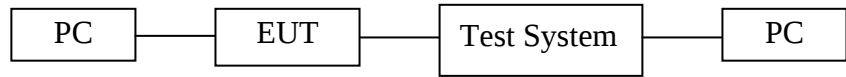


channel 39



7. MAXIMUM PEAK OUTPUT POWER

7.1. Block Diagram of Test Setup



(EUT: Massage Chair)

7.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

7.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

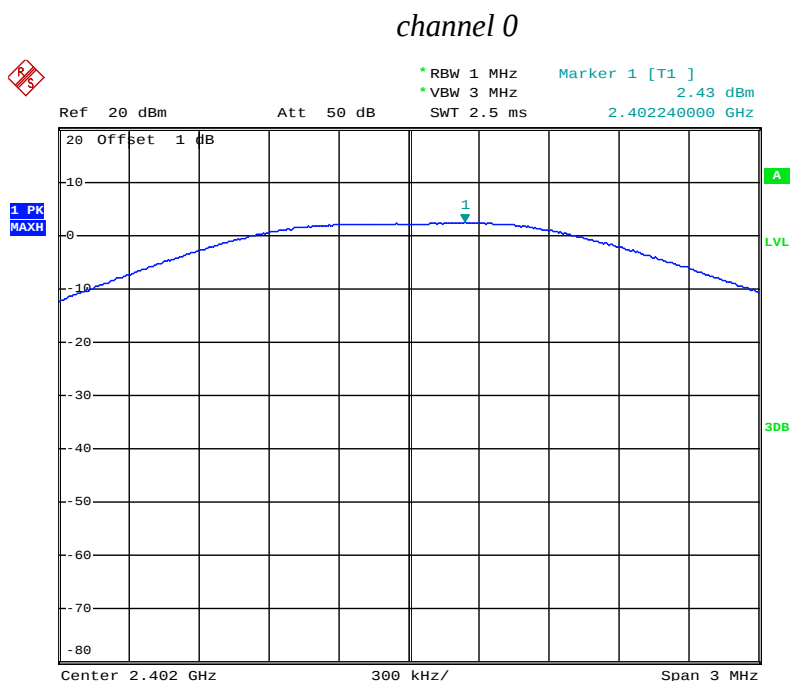
7.5.2. Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz.

7.5.3. Measurement the maximum peak output power.

7.6.Test Result

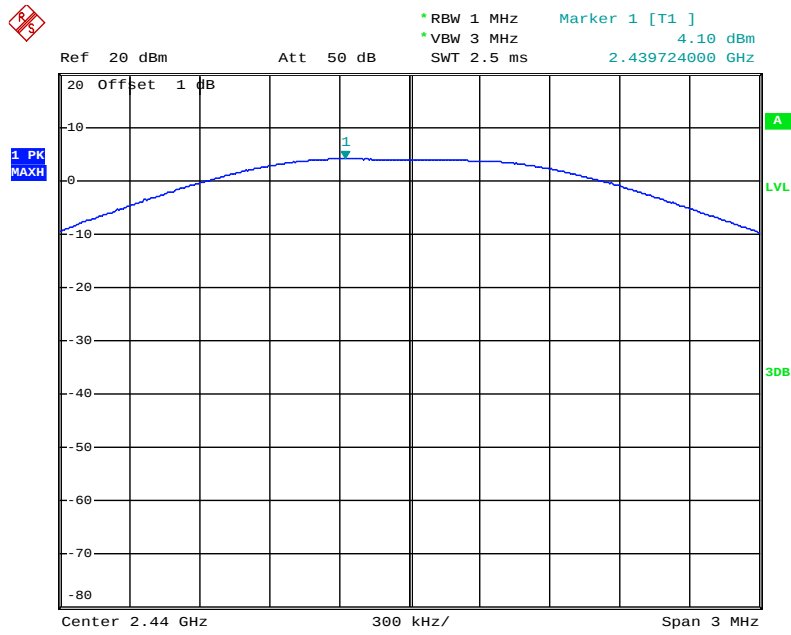
Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Limit (dBm)	Pass / Fail
0	2402	2.43	30	PASS
19	2440	4.10	30	PASS
39	2480	4.35	30	PASS

The spectrum analyzer plots are attached as below.



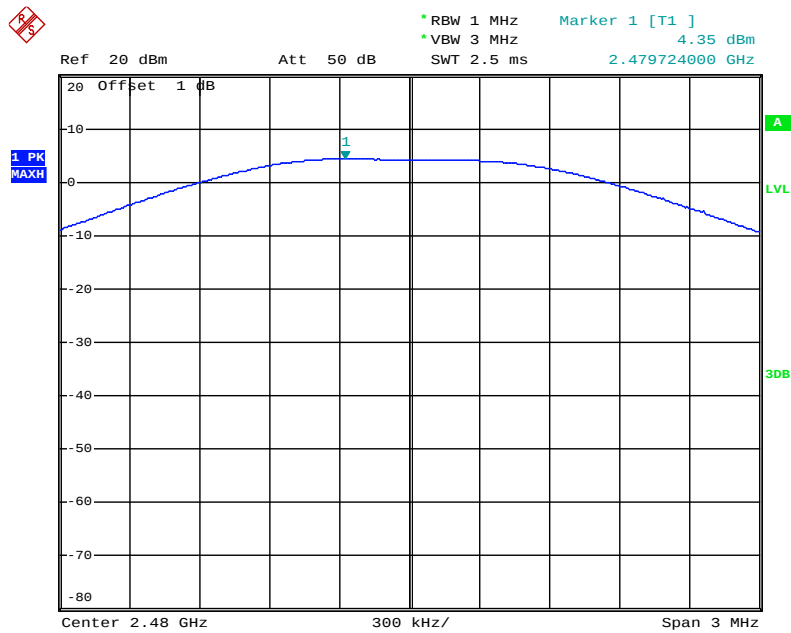
Date: 6.NOV.2017 10:30:13

channel 19



Date: 6.NOV.2017 10:29:11

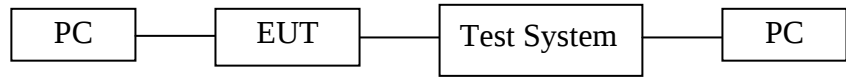
channel 39



Date: 6.NOV.2017 10:28:41

8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Block Diagram of Test Setup



(EUT: Massage Chair)

8.2. The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.4. Operating Condition of EUT

8.4.1. Setup the EUT and simulator as shown as Section 8.1.

8.4.2. Turn on the power of all equipment.

8.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

8.5. Test Procedure

8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.2. Measurement Procedure PKPSD:

8.5.3. This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3kHz) and repeat.

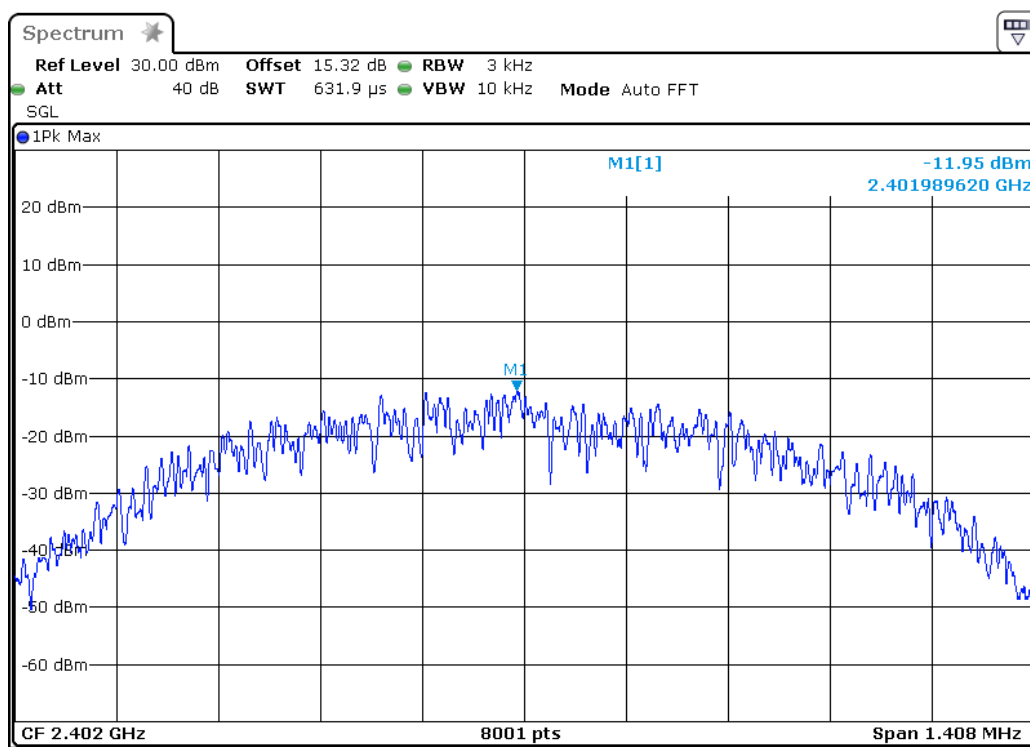
8.5.4. Measurement the maximum power spectral density.

8.6. Test Result

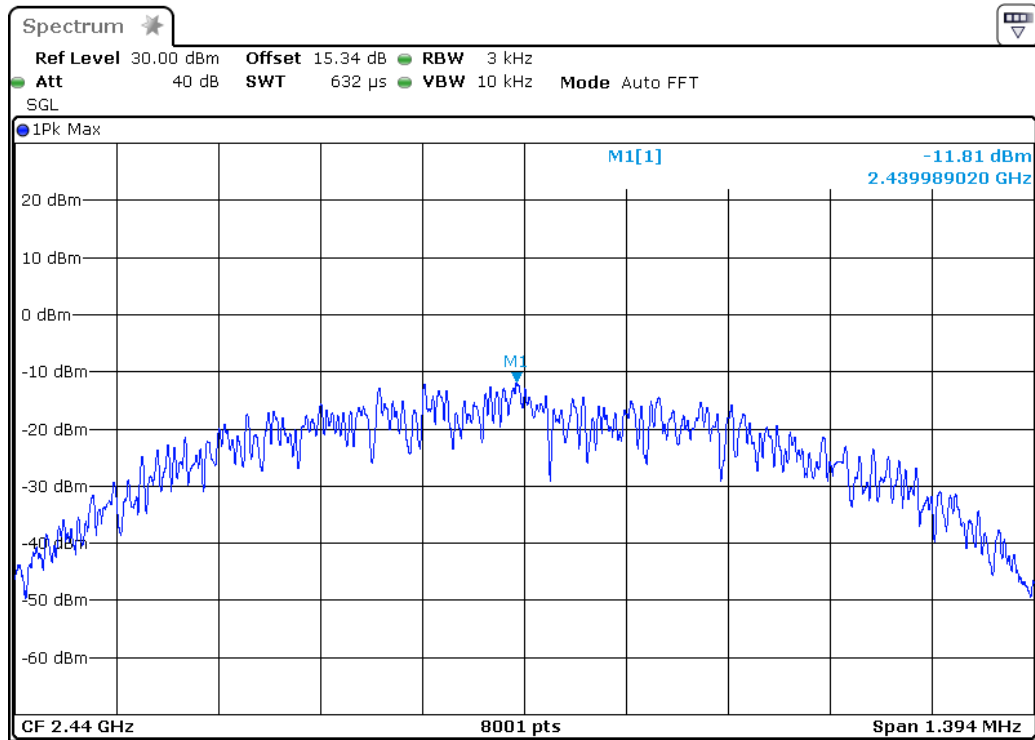
CHANNEL NUMBER	FREQUENCY (MHz)	PSD (dBm/3KHz)	LIMIT (dBm/3KHz)	PASS/FAIL
0	2402	-11.95	8	PASS
19	2440	-11.81	8	PASS
39	2480	-11.70	8	PASS

The spectrum analyzer plots are attached as below.

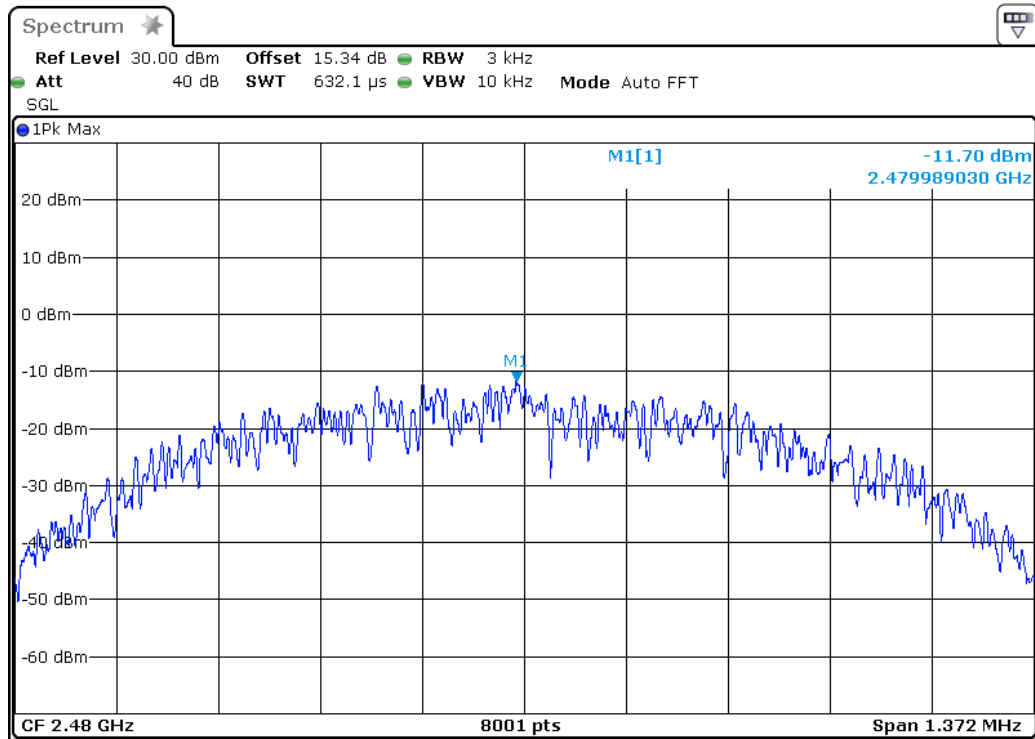
channel 0



channel 19

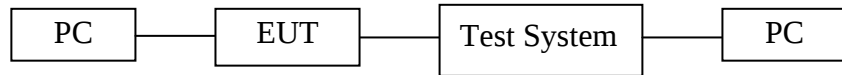


channel 39



9. BAND EDGE COMPLIANCE TEST

9.1. Block Diagram of Test Setup



(EUT: Massage Chair)

9.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4. Operating Condition of EUT

9.4.1. Setup the EUT and simulator as shown as Section 9.1.

9.4.2. Turn on the power of all equipment.

9.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

9.5. Test Procedure

Conducted Band Edge:

9.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

9.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

9.5.3. Radiate Band Edge:

9.5.4. The EUT is placed on a turntable, which is 0.1m above the ground plane and worked at highest radiated power.

9.5.5. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

9.5.6. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

9.5.7. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

9.5.8. RBW=1MHz, VBW=1MHz

9.5.9. The band edges was measured and recorded.

9.6. Test Result

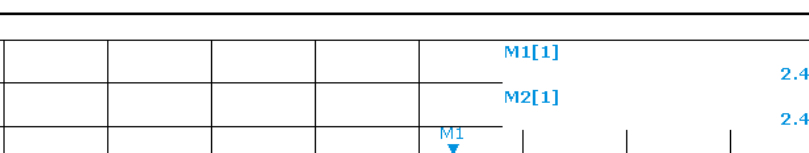
Pass

Channel	Frequency	Delta peak to band emission	Limit(dBc)
0	2.4GHz	40.62	20
39	2.4835GHz	42.33	20

Spectrum 

Ref Level 30.00 dBm **Offset** 15.32 dB **RBW** 100 kHz
Att 40 dB **SWT** 132.6 μ s **VBW** 300 kHz **Mode** Auto FFT
 SGL

1Pk Max



M1[1] 3.44 dBm
M2[1] -37.18 dBm
M1 2.4019948 GHz
M2 2.40000000 GHz

D1 -16.560 dBm

CF 2.4 GHz **8001 pts** **Span 60.0 MHz**

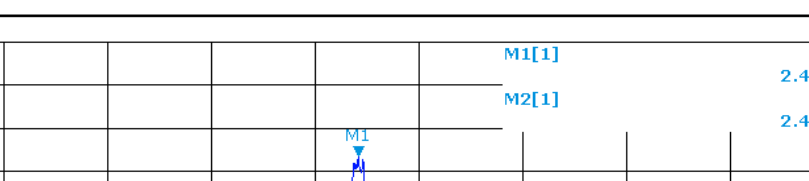
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4019948 GHz	3.44 dBm		
M2		1	2.4 GHz	-37.18 dBm		
M3		1	2.39 GHz	-38.78 dBm		
M4		1	2.3735475 GHz	-35.13 dBm		

Spectrum 

Ref Level 30.00 dBm Offset 15.34 dB RBW 100 kHz
 Att 40 dB SWT 132.6 μ s VBW 300 kHz Mode Auto FFT
 SGL

1Pk Max



3.46 dBm
 2.4799979 GHz
 -38.87 dBm
 2.48350000 GHz

D1 -16.540 dBm

M1
 M2
 M3
 M4

CF 2.4835 GHz 8001 pts Span 60.0 MHz

Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1			1	2.4799979 GHz	3.46 dBm		
M2			1	2.4835 GHz	-38.87 dBm		
M3			1	2.5 GHz	-38.69 dBm		
M4			1	2.49076 GHz	-35.32 dBm		

Radiated Band Edge Result



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: frank2017 #1578

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

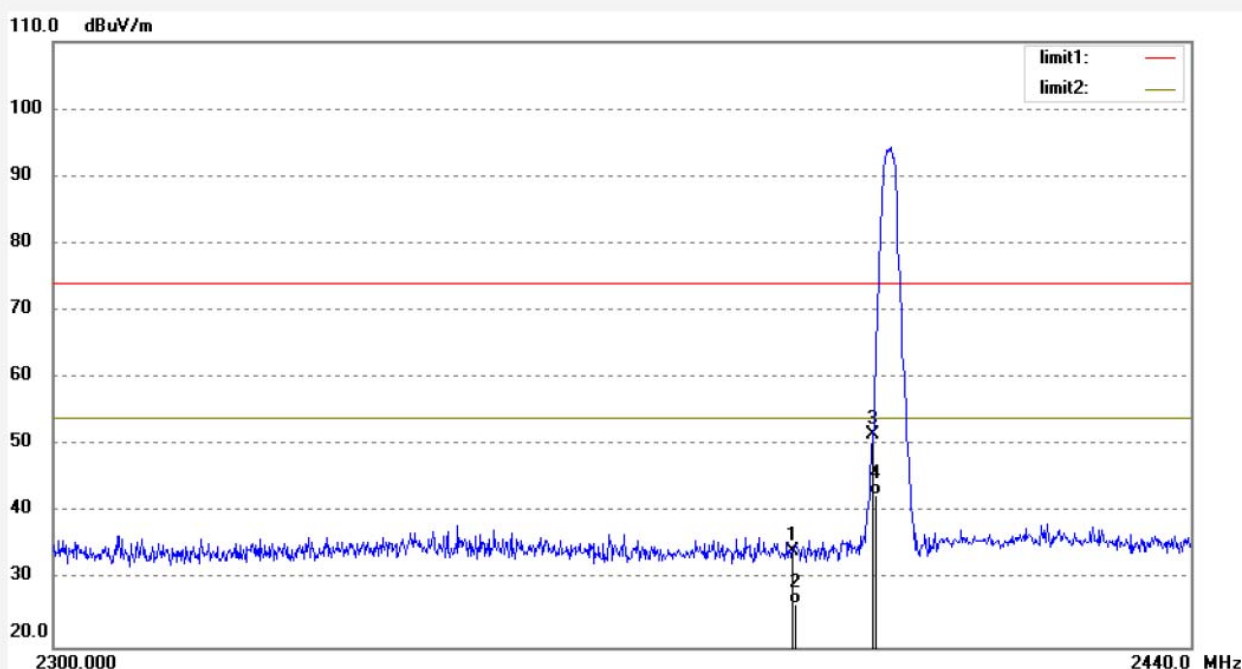
Date: 17/11/20/

Time: 17/10/08

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	38.14	-3.96	34.18	74.00	-39.82	peak	200	182	
2	2390.000	30.48	-3.96	26.52	54.00	-27.48	AVG	200	183	
3	2400.000	55.51	-3.91	51.60	74.00	-22.40	peak	200	130	
4	2400.000	46.45	-3.91	42.54	54.00	-11.46	AVG	200	128	

Job No.: frank2017 #1579

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

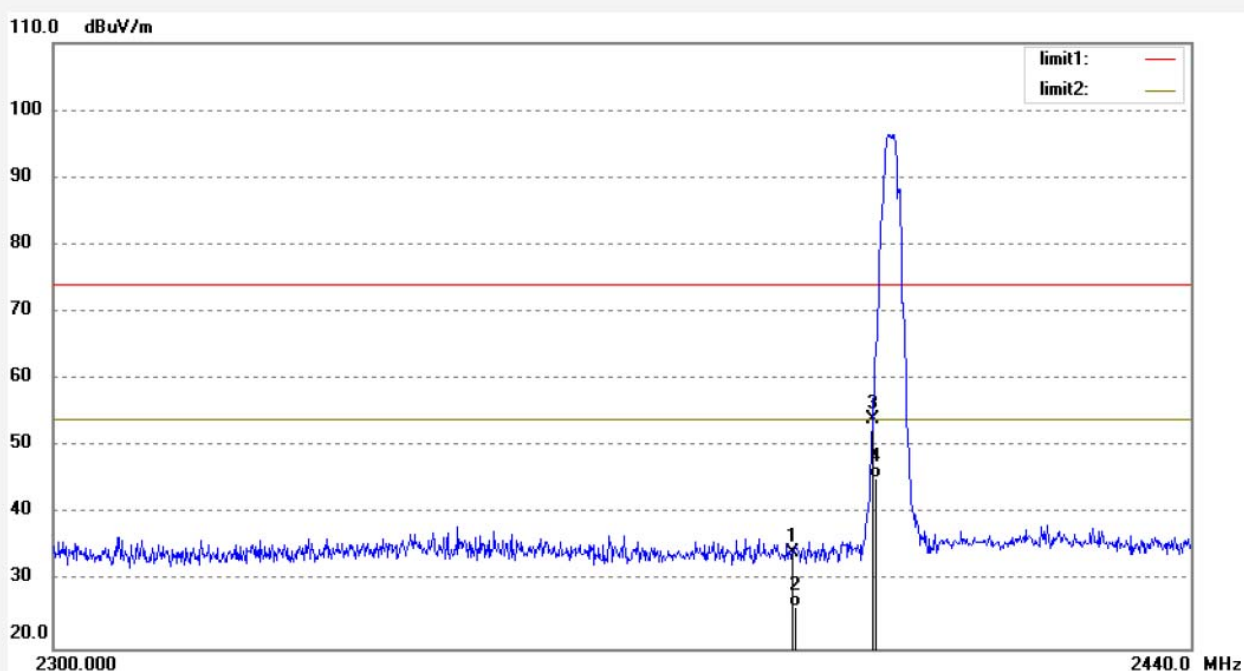
Date: 17/11/20/

Time: 17/44/08

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210

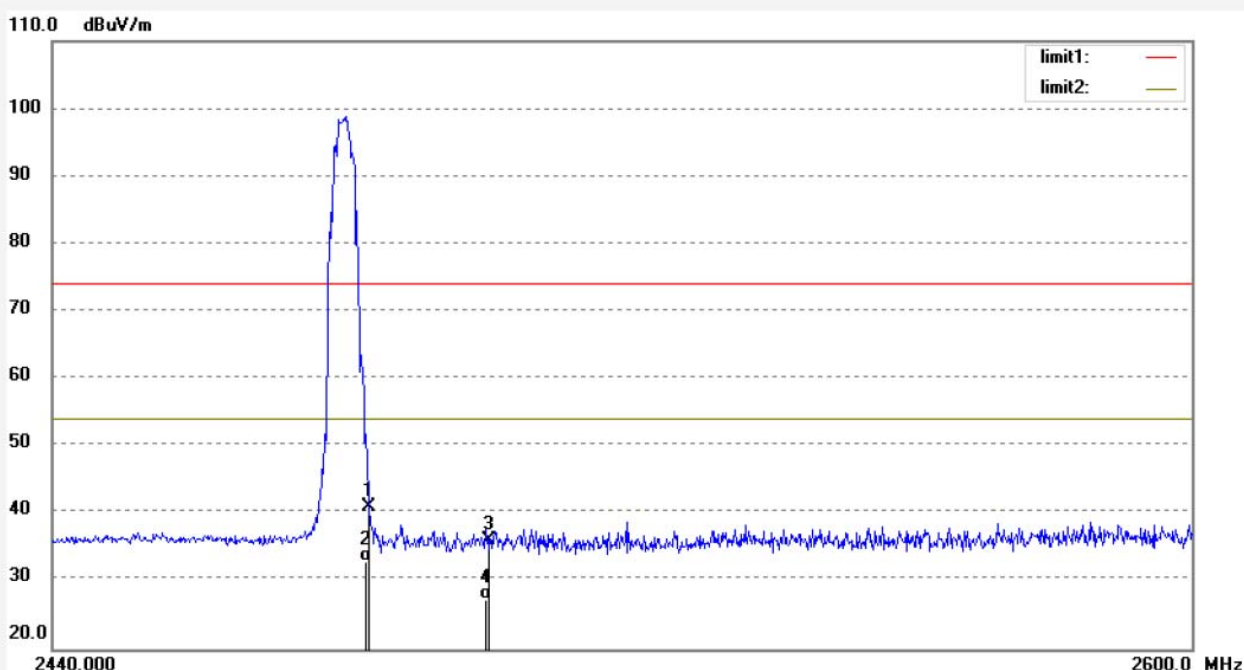


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2390.000	38.14	-3.96	34.18	74.00	-39.82	peak	150	133	
2	2390.000	30.12	-3.96	26.16	54.00	-27.84	AVG	150	134	
3	2400.000	58.01	-3.91	54.10	74.00	-19.90	peak	250	128	
4	2400.000	49.17	-3.91	45.26	54.00	-8.74	AVG	250	127	

Job No.: frank2017 #1581
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: Massage Chair
Mode: TX 2480MHz
Model: EC-625B
Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 17/11/20/
Time: 17/52/18
Engineer Signature: Frank
Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.55	-3.50	41.05	74.00	-32.95	peak	300	135	
2	2483.500	36.45	-3.50	32.95	54.00	-21.05	AVG	300	134	
3	2500.000	39.58	-3.42	36.16	74.00	-37.84	peak	250	280	
4	2500.000	30.78	-3.42	27.36	54.00	-26.64	AVG	250	278	

Job No.: frank2017 #1580

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2480MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

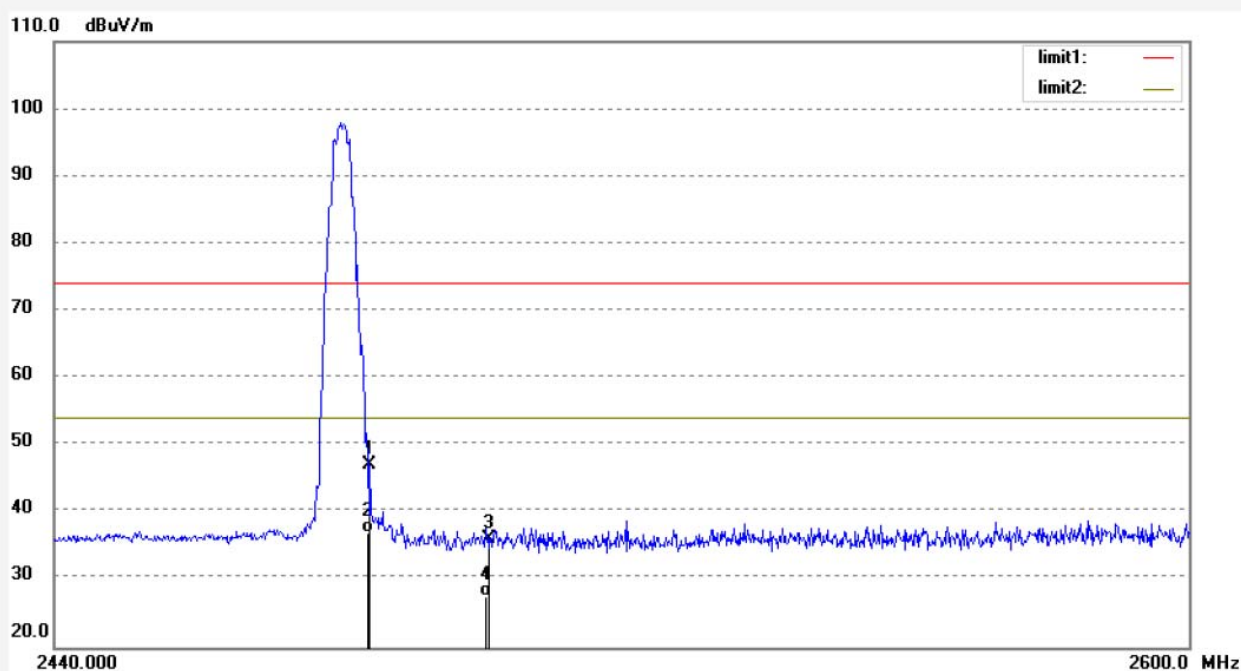
Date: 17/11/20/

Time: 17/45/18

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	50.55	-3.50	47.05	74.00	-26.95	peak	200	121	
2	2483.500	40.48	-3.50	36.98	54.00	-17.02	AVG	200	120	
3	2500.000	39.58	-3.42	36.16	74.00	-37.84	peak	200	358	
4	2500.000	30.99	-3.42	27.57	54.00	-26.43	AVG	200	357	

Note:

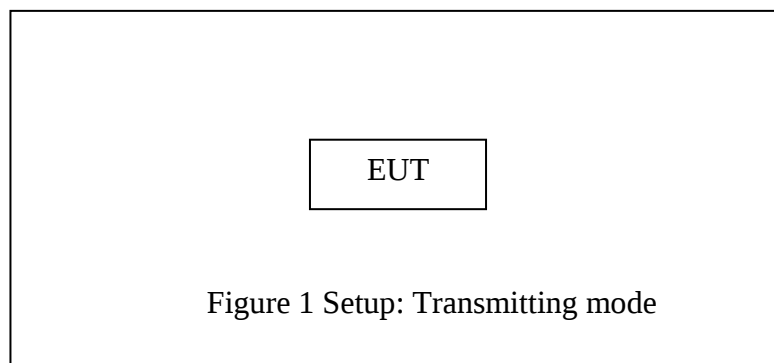
1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

$$\text{Result} = \text{Reading} + \text{Corrected Factor}$$

10.RADIATED SPURIOUS EMISSION TEST

10.1.Block Diagram of Test Setup

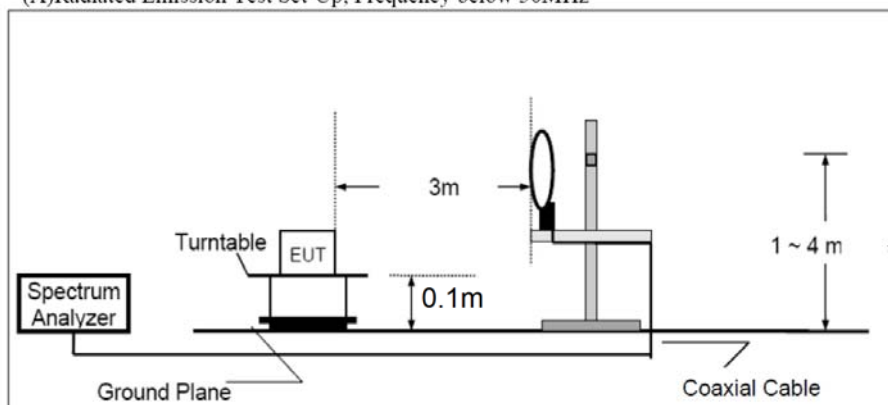
10.1.1.Block diagram of connection between the EUT and peripherals



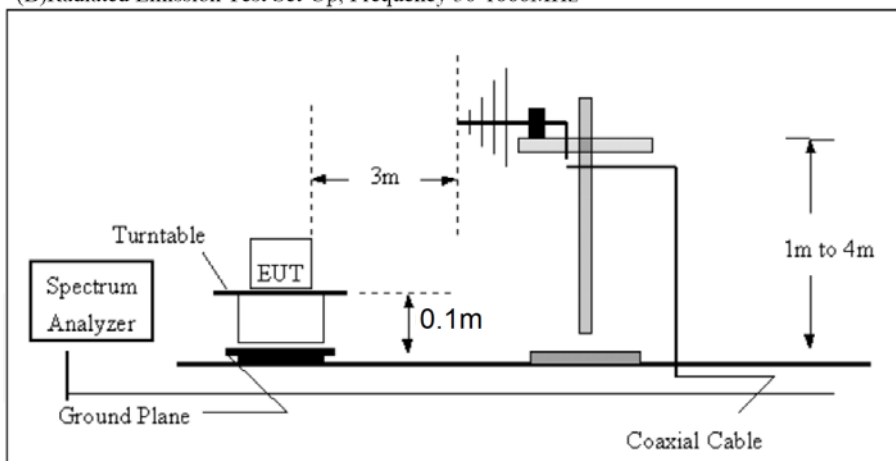
(EUT: Massage Chair)

10.1.2.Semi-Anechoic Chamber Test Setup Diagram

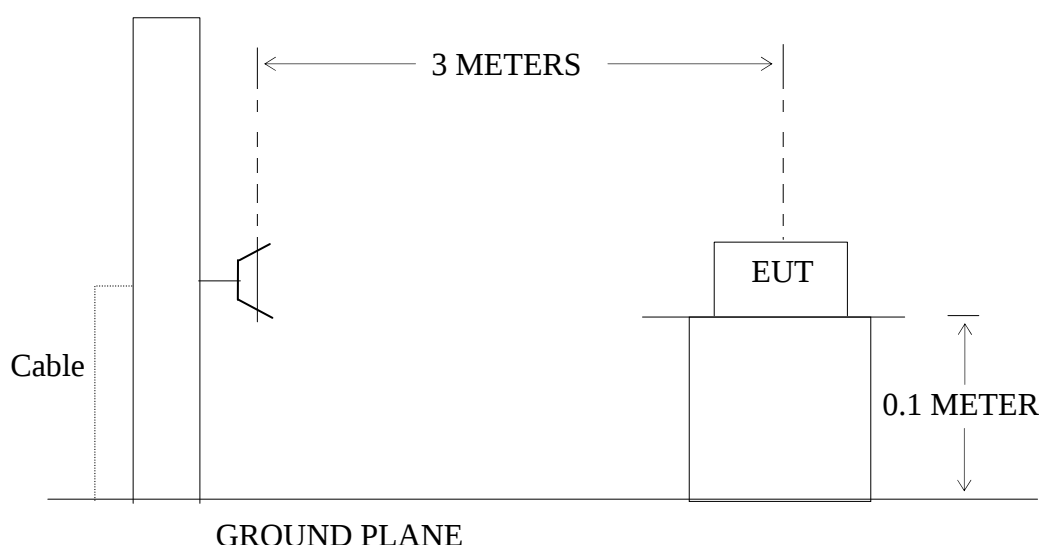
(A)Radiated Emission Test Set-Up, Frequency below 30MHz



(B)Radiated Emission Test Set-Up, Frequency 30-1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1GHz



10.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3.Restricted bands of operation

10.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510

²Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

10.4.Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.5. Operating Condition of EUT

10.5.1. Setup the EUT and simulator as shown as Section 10.1.

10.5.2. Turn on the power of all equipment.

10.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

10.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.1 meter high above ground (Below 1GHz). The EUT and its simulators are placed on a turntable, which is 0.1 meter high above ground (Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

10.7. The Field Strength of Radiation Emission Measurement Results

PASS.

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The radiation emissions from 9kHz-30MHz and 18-25GHz are not reported, because the test values lower than the limits of 20dB.

Below 1GHz



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: frank2017 #1577

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

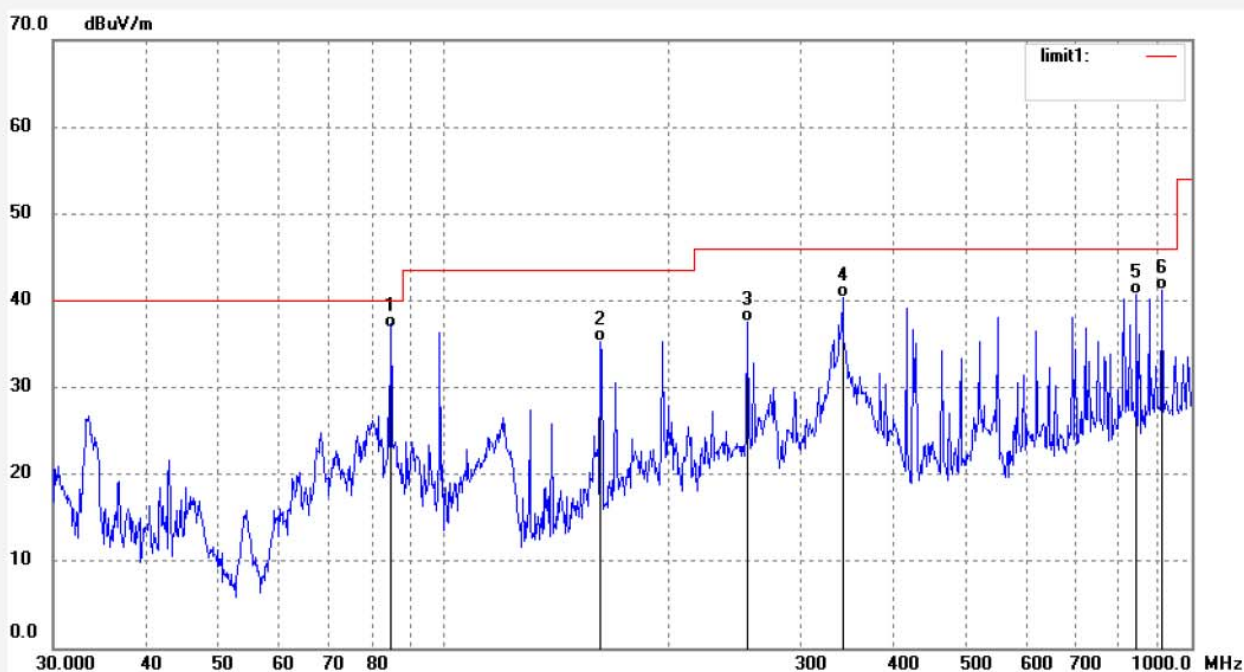
Date: 17/11/20/

Time: 17/33/47

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	84.8782	64.27	-27.45	36.82	40.00	-3.18	QP	200	360	
2	162.0197	62.18	-26.86	35.32	43.50	-8.18	QP	200	144	
3	254.9251	60.89	-23.35	37.54	46.00	-8.46	QP	200	276	
4	341.2441	59.96	-19.69	40.27	46.00	-5.73	QP	200	124	
5	844.8028	48.87	-8.13	40.74	46.00	-5.26	QP	200	348	
6	912.6951	48.17	-6.97	41.20	46.00	-4.80	QP	200	247	

Job No.: frank2017 #1578

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

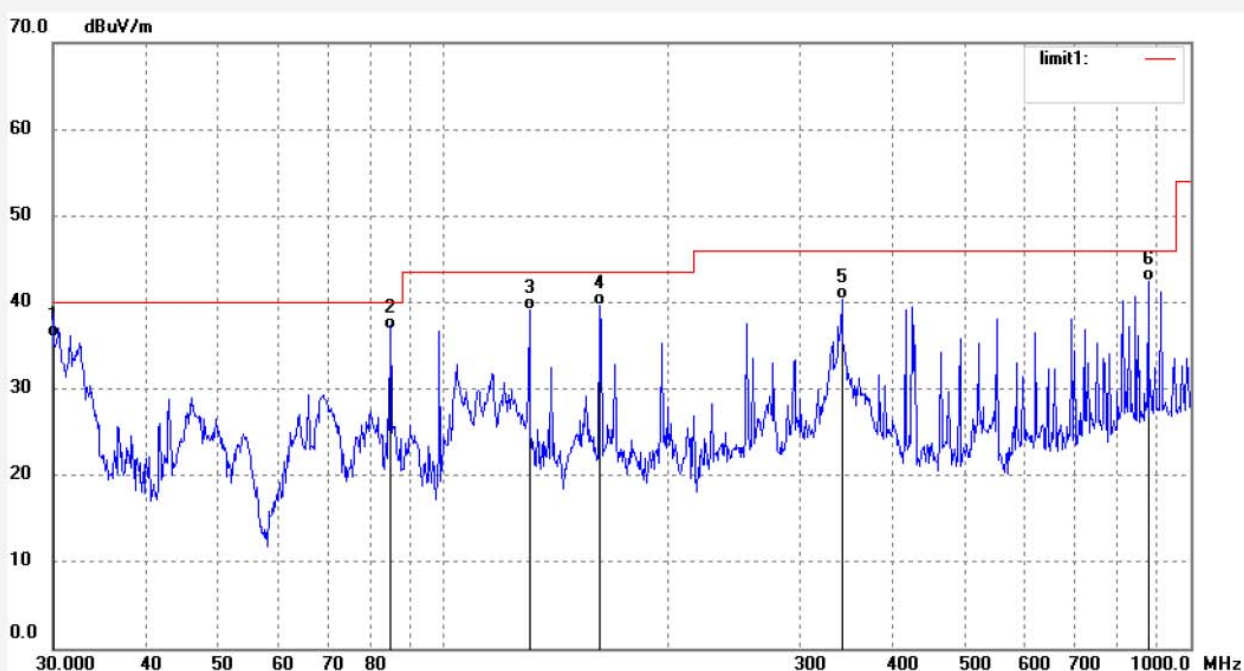
Date: 17/11/20/

Time: 17/34/19

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.0000	56.15	-20.20	35.95	40.00	-4.05	QP	100	112	
2	84.8782	64.27	-27.45	36.82	40.00	-3.18	QP	100	124	
3	130.3048	66.86	-27.72	39.14	43.50	-4.36	QP	100	235	
4	162.0197	66.57	-26.86	39.71	43.50	-3.79	QP	100	279	
5	341.2441	59.96	-19.69	40.27	46.00	-5.73	QP	100	360	
6	878.0931	49.94	-7.56	42.38	46.00	-3.62	QP	100	193	

Job No.: frank2017 #1580

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2440MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

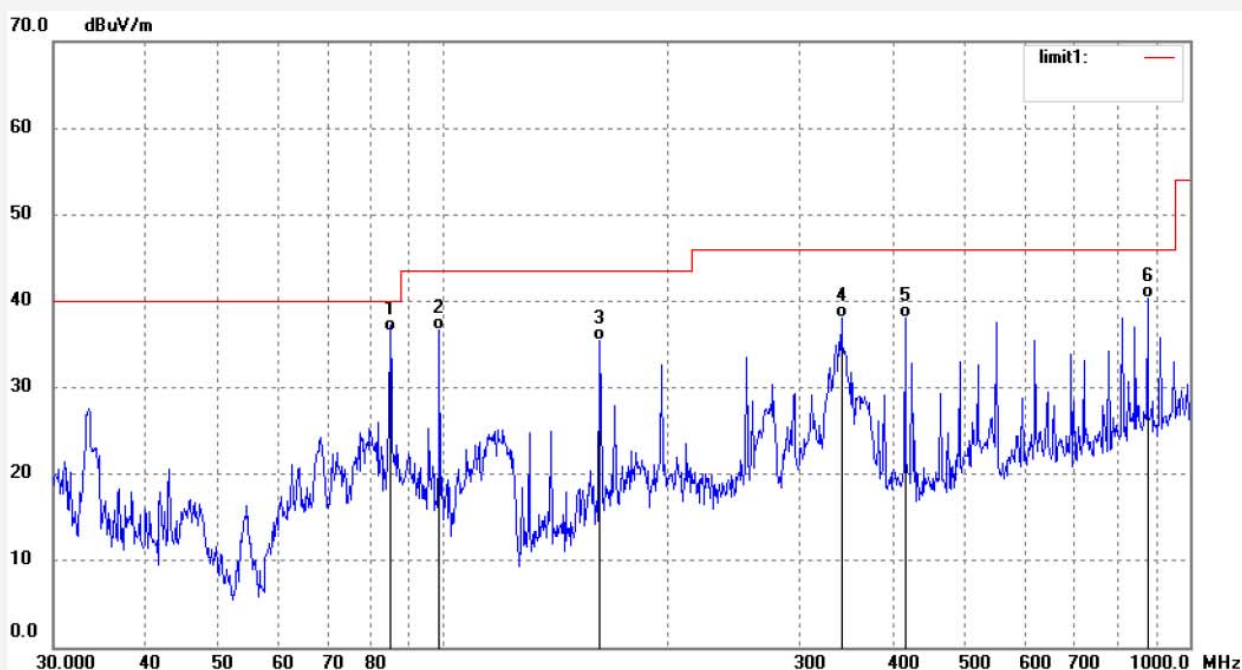
Date: 17/11/20/

Time: 17/35/38

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	84.8782	64.01	-27.45	36.56	40.00	-3.44	QP	200	182	
2	98.7215	64.61	-27.88	36.73	43.50	-6.77	QP	200	345	
3	162.0197	62.28	-26.86	35.42	43.50	-8.08	QP	200	240	
4	341.2441	57.74	-19.69	38.05	46.00	-7.95	QP	200	158	
5	415.4485	56.17	-18.05	38.12	46.00	-7.88	QP	200	61	
6	878.0931	47.98	-7.56	40.42	46.00	-5.58	QP	200	324	

Job No.: frank2017 #1579

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2440MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

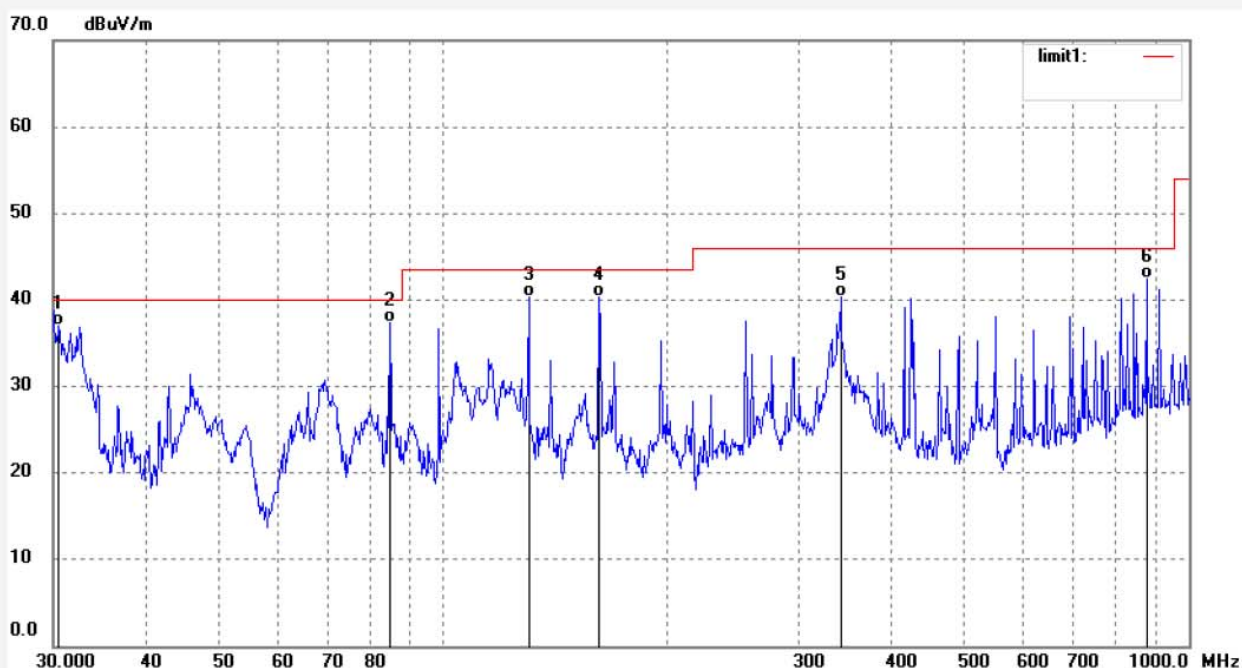
Date: 17/11/20/

Time: 17/35/17

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	30.5317	57.38	-20.33	37.05	40.00	-2.95	QP	100	267	
2	84.8782	64.77	-27.45	37.32	40.00	-2.68	QP	100	352	
3	130.3048	68.10	-27.72	40.38	43.50	-3.12	QP	100	246	
4	162.0197	67.15	-26.86	40.29	43.50	-3.21	QP	100	189	
5	341.2441	59.96	-19.69	40.27	46.00	-5.73	QP	100	247	
6	878.0931	49.95	-7.56	42.39	46.00	-3.61	QP	100	103	



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: frank2017 #1581

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2480MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

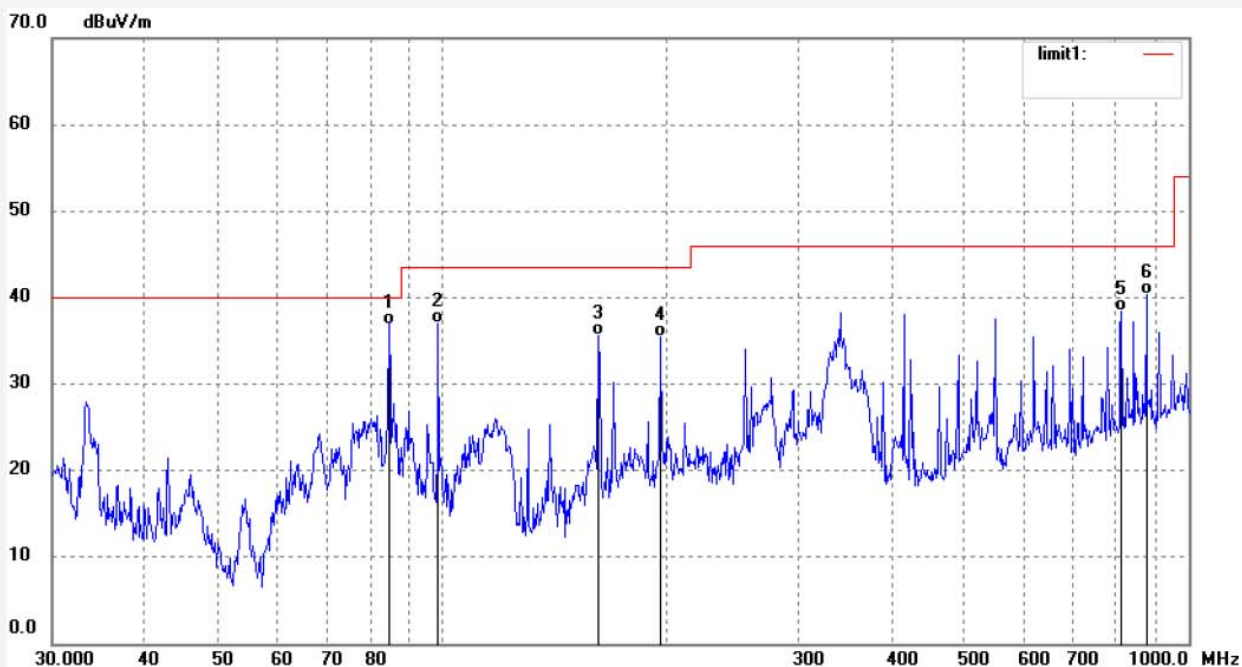
Date: 17/11/20/

Time: 17/35/58

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	84.8782	64.21	-27.45	36.76	40.00	-3.24	QP	200	301	
2	98.7215	64.81	-27.88	36.93	43.50	-6.57	QP	200	268	
3	162.0197	62.48	-26.86	35.62	43.50	-7.88	QP	200	261	
4	195.8701	59.98	-24.59	35.39	43.50	-8.11	QP	200	320	
5	812.7744	47.17	-8.71	38.46	46.00	-7.54	QP	200	249	
6	878.0931	47.98	-7.56	40.42	46.00	-5.58	QP	200	155	

Job No.: frank2017 #1582

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2480MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

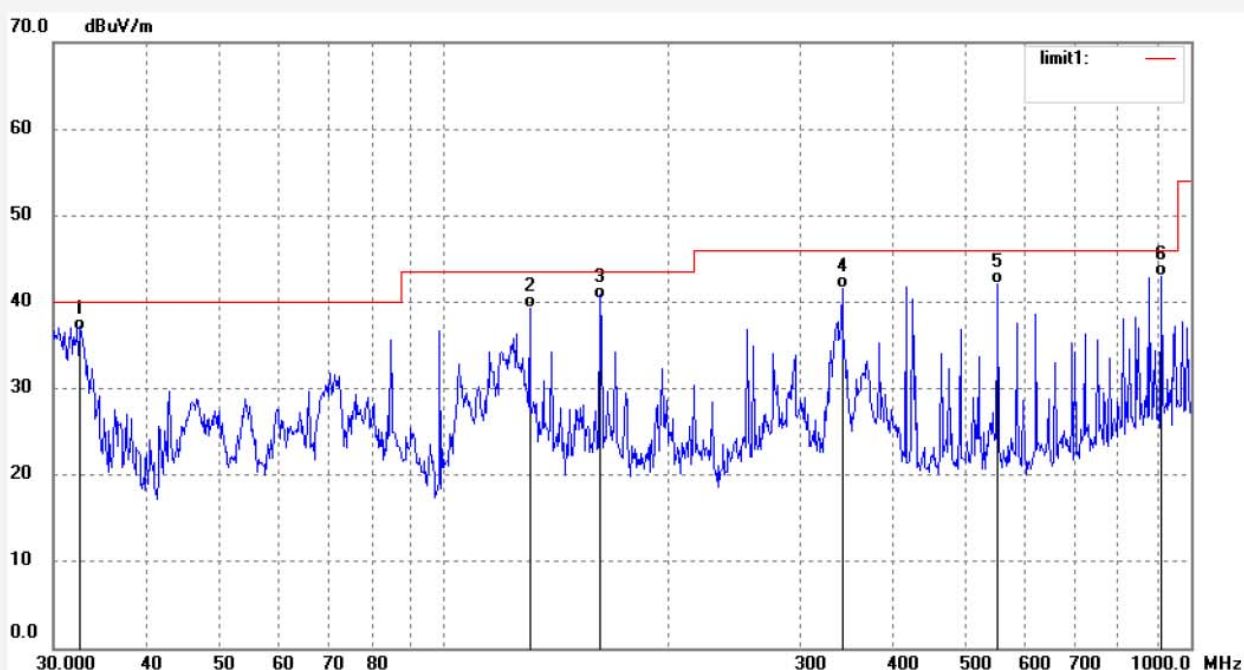
Date: 17/11/20/

Time: 17/36/37

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.5248	57.51	-20.82	36.69	40.00	-3.31	QP	100	156	
2	130.3048	67.00	-27.72	39.28	43.50	-4.22	QP	100	360	
3	162.0197	67.28	-26.86	40.42	43.50	-3.08	QP	100	248	
4	341.2441	61.17	-19.69	41.48	46.00	-4.52	QP	100	279	
5	552.2269	56.76	-14.75	42.01	46.00	-3.99	QP	100	124	
6	912.6951	49.93	-6.97	42.96	46.00	-3.04	QP	100	235	

Above 1GHz



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: frank2017 #1573

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

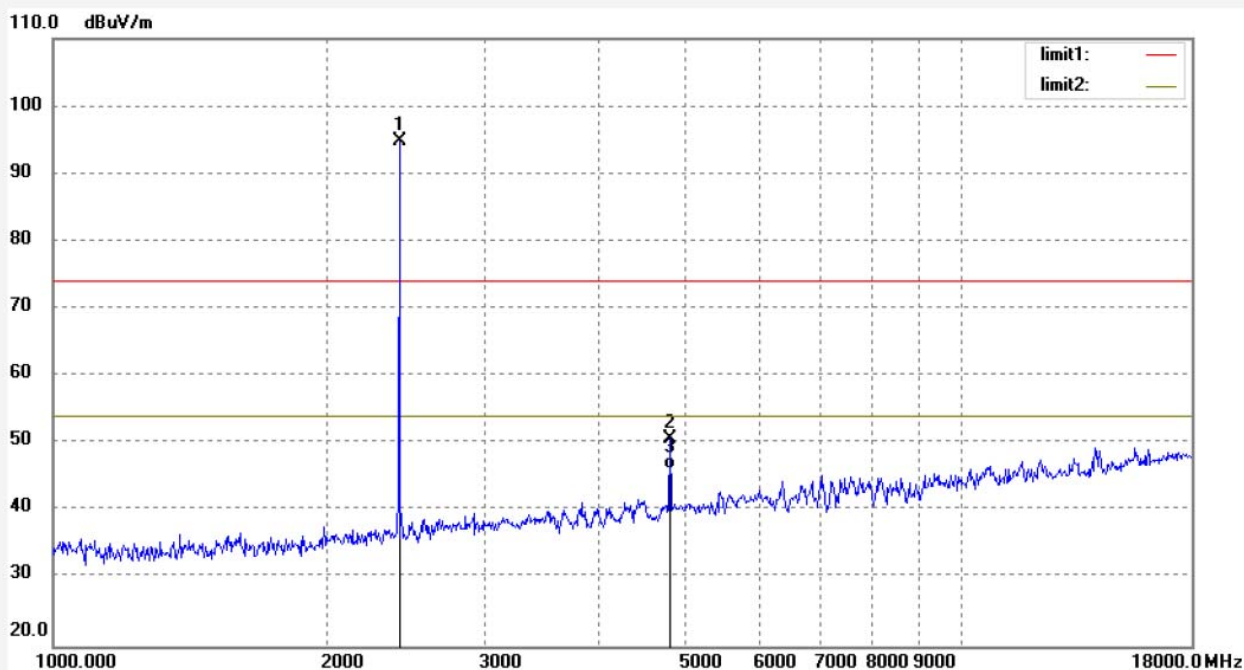
Date: 17/11/20/

Time: 17/21/05

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.100	98.76	-3.87	94.89			peak	120	237	
2	4804.203	46.94	3.70	50.64	74.00	-23.36	peak	200	130	
3	4804.203	42.45	3.70	46.15	54.00	-7.85	AVG	200	128	

Job No.: frank2017 #1572

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2402MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

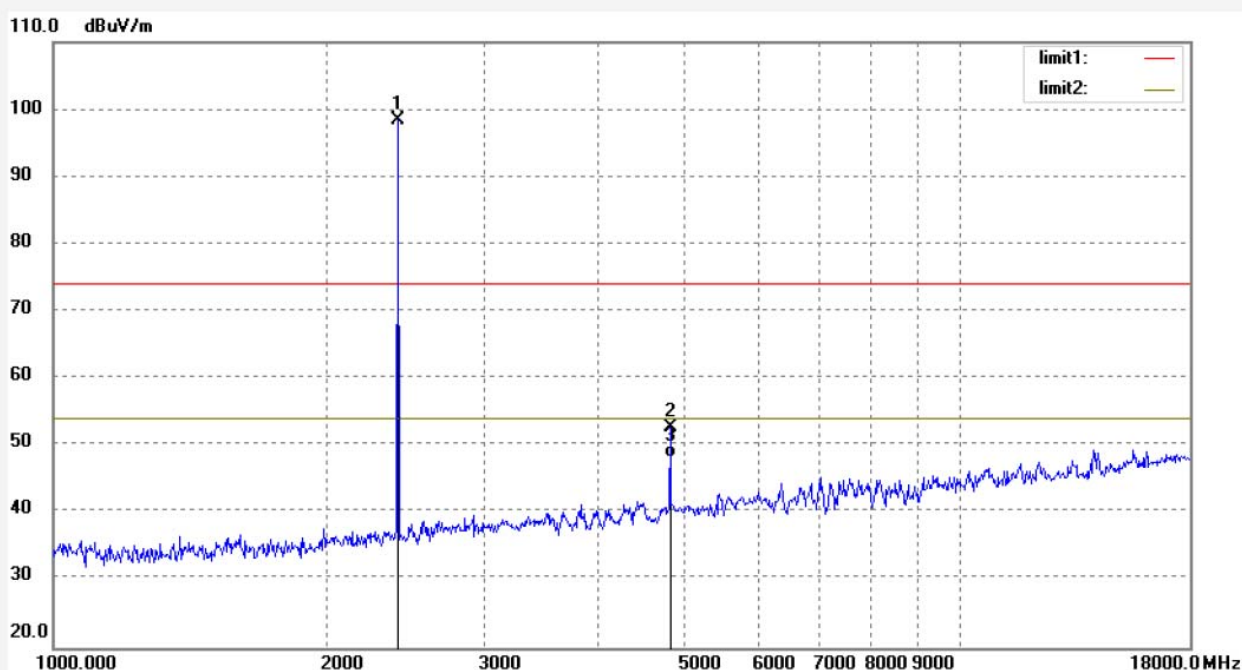
Date: 17/11/20/

Time: 17/15/05

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.199	102.30	-3.91	98.39			peak	130	238	
2	4804.328	49.06	3.75	52.81	74.00	-21.19	peak	150	320	
3	4804.328	44.45	3.75	48.20	54.00	-5.80	AVG	150	322	

Job No.: frank2017 #1574

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2440MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

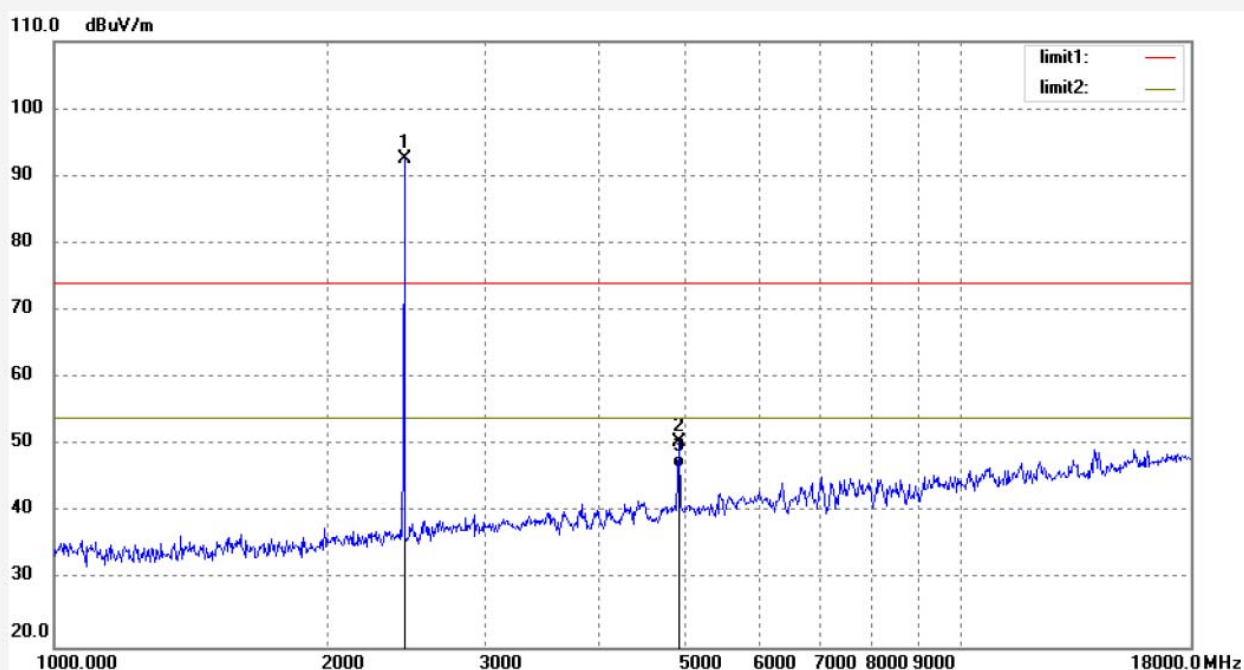
Date: 17/11/20/

Time: 17/25/05

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.007	96.31	-3.73	92.58			peak	130	139	
2	4880.160	46.24	4.18	50.42	74.00	-23.58	peak	200	185	
3	4880.160	42.42	4.18	46.60	54.00	-7.40	AVG	200	184	

Job No.: frank2017 #1575

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2440MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

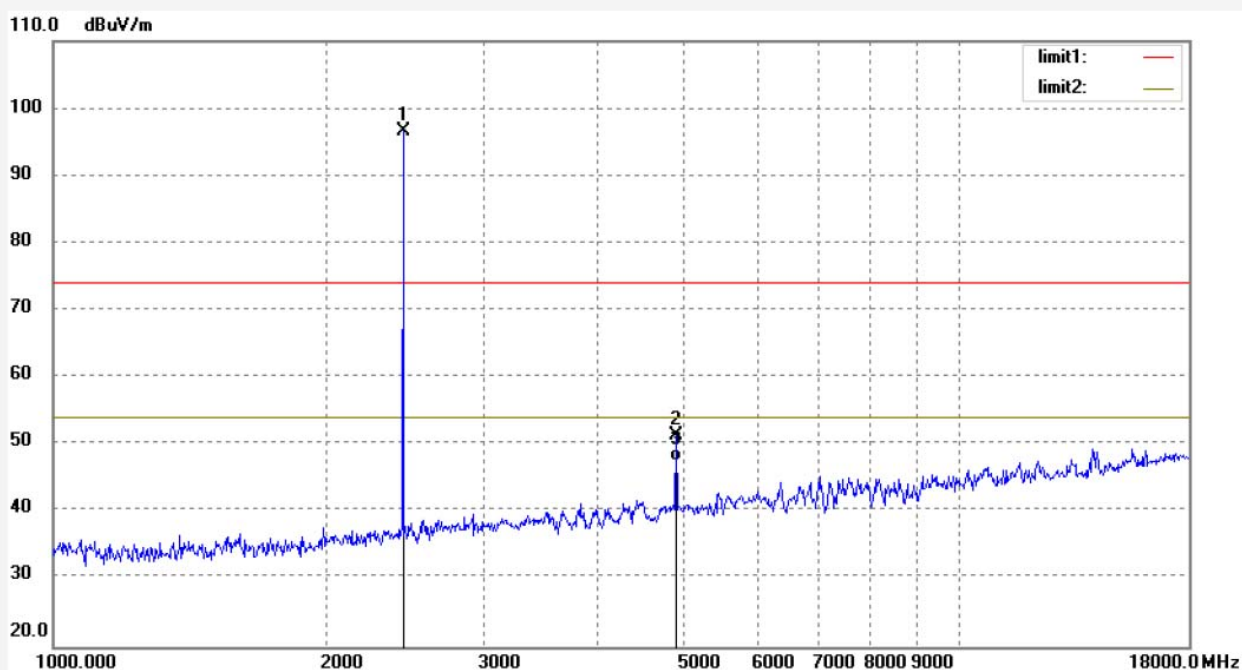
Date: 17/11/20/

Time: 17/28/05

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2440.007	100.31	-3.73	96.58			peak	120	238	
2	4880.017	47.31	4.11	51.42	74.00	-22.58	peak	150	120	
3	4880.017	43.45	4.11	47.56	54.00	-6.44	AVG	150	121	

Job No.: frank2017 #1577

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2480MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Horizontal

Power Source: AC 120V/60Hz

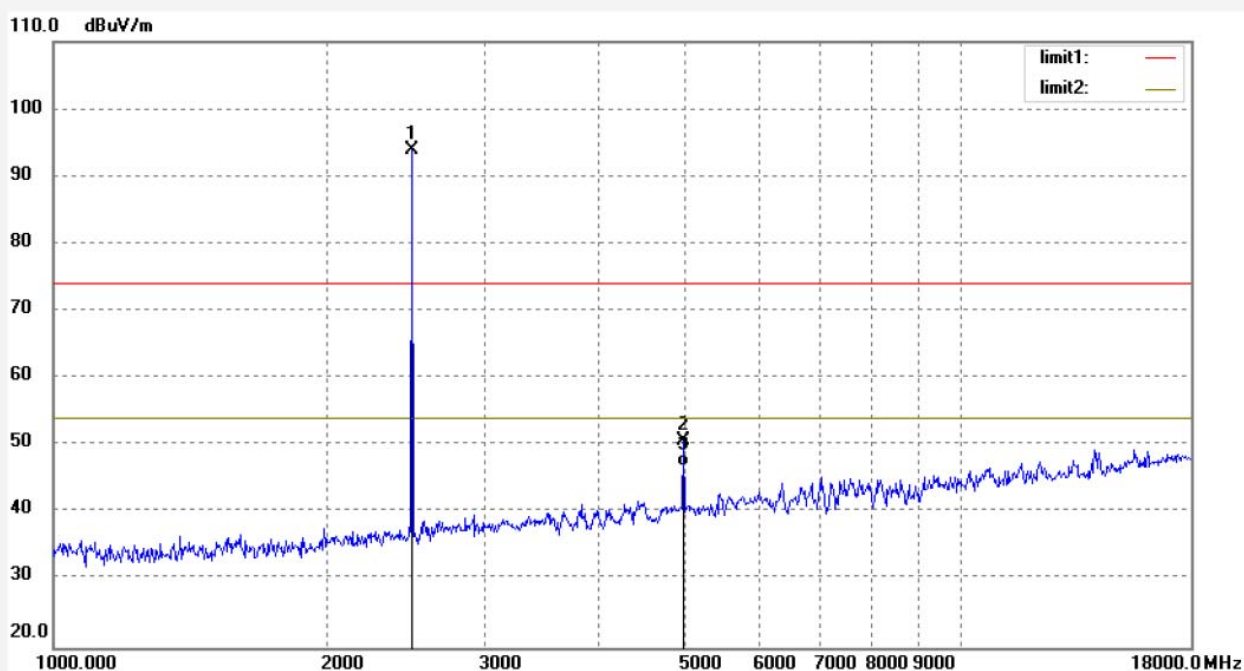
Date: 17/11/20/

Time: 17/36/32

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.067	97.33	-3.48	93.85			peak	110	92	
2	4960.146	46.31	4.42	50.73	74.00	-23.27	peak	200	328	
3	4960.146	42.48	4.42	46.90	54.00	-7.10	AVG	200	327	

Job No.: frank2017 #1576

Standard: FCC PK

Test item: Radiation Test

Temp.(C)/Hum.(%) 25 C / 55 %

EUT: Massage Chair

Mode: TX 2480MHz

Model: EC-625B

Manufacturer: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD

Polarization: Vertical

Power Source: AC 120V/60Hz

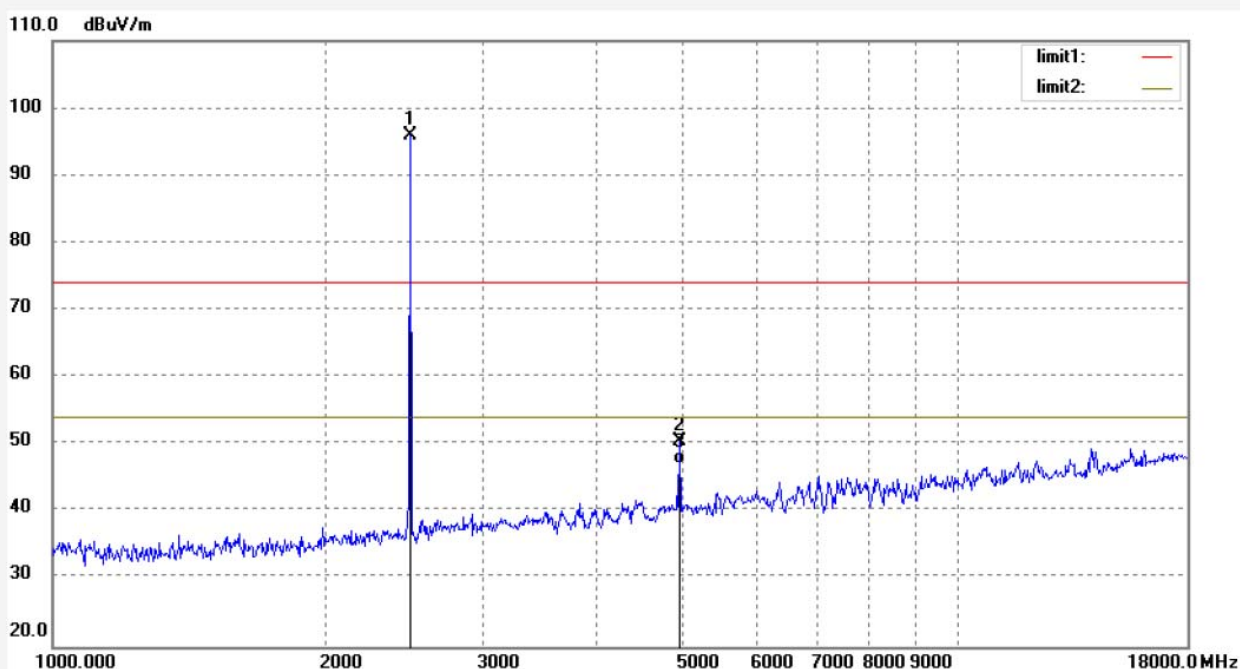
Date: 17/11/20/

Time: 17/31/12

Engineer Signature: Frank

Distance: 3m

Note: Report NO.:ATE20172210



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.067	99.33	-3.48	95.85			peak	120	56	
2	4960.146	46.22	4.37	50.59	74.00	-23.41	peak	150	348	
3	4960.146	42.78	4.37	47.15	54.00	-6.85	AVG	150	347	

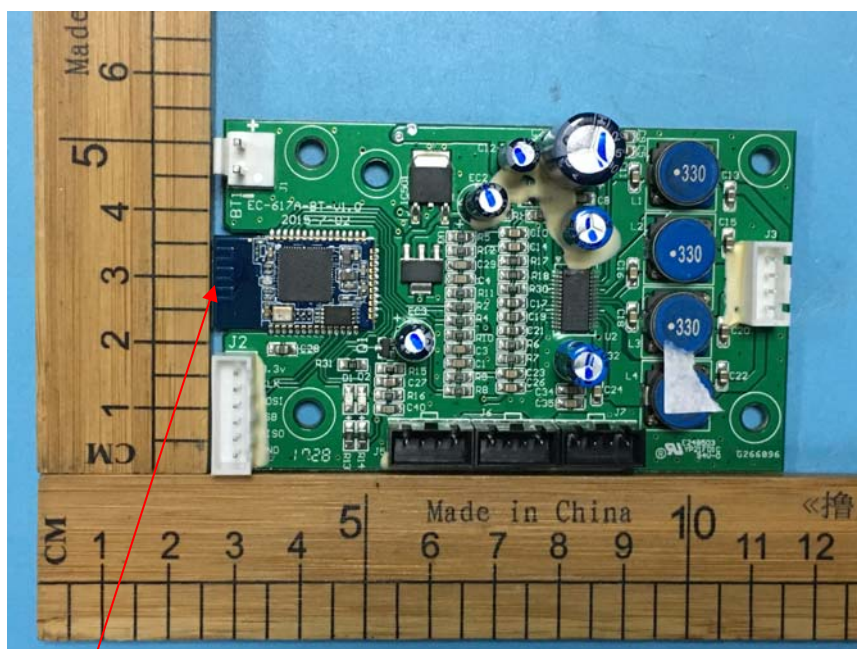
11.ANTENNA REQUIREMENT

11.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

11.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Antenna gain of EUT is 2dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna