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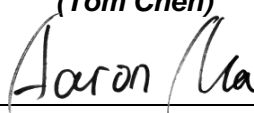

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# RF Exposure Evaluation Report

**Report No. :** CQASZ20200100044E-03  
**Applicant:** XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.  
**Address of Applicant:** (5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA  
**Equipment Under Test (EUT):**  
**EUT Name:** Massage Chair  
**Model No.:** EC-806C, Osaki Pro Maestro 2.0  
**Test Model No.:** EC-806C  
**Brand Name:** N/A  
**FCC ID:** YMX-EC806C  
**Standards:** 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2020-01-10  
**Date of Test:** 2020-01-10 to 2020-01-17  
**Date of Issue:** 2020-01-17  
**Test Result :** **PASS\***

\*In the configuration tested, the EUT complied with the standards specified above

**Tested By:**   
\_\_\_\_\_  
(Tom Chen)  
**Reviewed By:**   
\_\_\_\_\_  
(Aaron Ma)  
**Approved By:**   
\_\_\_\_\_  
( Jack Ai)



## 1 Version

### Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20200100044E-03	Rev.01	Initial report	2020-01-17

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### 3 General Information

#### 3.1 Client Information

Applicant:	XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD.
Address of Applicant:	(5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA
Manufacturer:	XIAMEN HEALTHCARE ELECTRONIC CO.,LTD.
Address of Manufacturer:	65-66#, 62-63# BUILDING, SIMING ZONE, TONGAN INDUSTRIAL DISTRICT, XIAMEN CITY, FUJIAN PROVINCE, P.R. CHINA

#### 3.2 General Description of EUT

Product Name:	Massage Chair
Model No.:	EC-806C, Osaki Pro Maestro 2.0
Test Model No.:	EC-806C
Trade Mark:	N/A
Hardware Version:	1.0
Software Version:	1.0
Bluetooth Version:	V4.0
Sample Type:	<input type="checkbox"/> Mobile <input type="checkbox"/> Portable <input checked="" type="checkbox"/> Fix Location
Power Supply:	AC120V 60Hz

#### 3.3 General Description of BT

Operation Frequency:	2402MHz~2480MHz
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Number of Channel:	79
Transfer Rate:	1Mbps/2Mbps/3Mbps
Hopping Channel Type:	Adaptive Frequency Hopping systems
Test Software of EUT:	Blue test 3 (manufacturer declare )
Antenna Type:	Ceramic antenna
Antenna Gain:	2.5dBi

#### 3.4 General Description of BLE

Operation Frequency:	2402MHz~2480MHz
Modulation Type:	GFSK
Transfer Rate:	1Mbps/2Mbps
Number of Channel:	40
Test Software of EUT:	Blue test 3 (manufacturer declare )
Antenna Type:	Ceramic antenna
Antenna Gain:	2.5dBi

Model No.: EC-806C, Osaki Pro Maestro 2.0

Only the model EC-806C was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance, pack and model name.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

##### 4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### 4.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

### 4.1.3 EUT RF Exposure

#### Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.020	0±1	1	1.259
Middle(2441MHz)	0.600	1±1	2	1.585
Highest(2480MHz)	1.130	1±1	2	1.585
π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	1.660	1.5±1	2.5	1.778
Middle(2441MHz)	2.190	2.5±1	3.5	2.239
Highest(2480MHz)	2.740	2.5±1	3.5	2.239
8DPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	2.040	1.5±1	2.5	1.778
Middle(2441MHz)	2.570	2.5±1	3.5	2.239
Highest(2480MHz)	3.110	2.5±1	3.5	2.239

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	2.040	1.5±1	2.5	1.778	0.55	3.0
Middle (2441MHz)	2.570	2.5±1	3.5	2.239	0.70	
Highest (2480MHz)	3.110	2.5±1	3.5	2.239	0.71	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20200100044E-01

2) For BLE

Measurement Data

GFSK(1Mbps) mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-0.67	-0.5±1	0.5	1.122
Middle(2440MHz)	-0.75	-0.5±1	0.5	1.122
Highest(2480MHz)	-0.77	-0.5±1	0.5	1.122

Worst case: GFSK(1Mbps)						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-0.67	-0.5±1	0.5	1.122	0.35	3.0
Middle (2440MHz)	-0.75	-0.5±1	0.5	1.122	0.35	
Highest (2480MHz)	-0.77	-0.5±1	0.5	1.122	0.35	
Conclusion: the calculated value ≤3.0, SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: CQASZ20200100044E-02

BDR, EDR and BLE can not simultaneous transmitting at same time.