



Report No.: TW2108136E File reference No.: 2021-09-01

Applicant: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP

CO., LTD.

Product: Massage Chair

Model No.: OI-3300J, OS-3D Otamic LE, OI-3300L, OS-Pro 3D Tecno

Trademark: N/A

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10 &FCC Part 15 Subpart C,

Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

# Jack Chung

Jack Chung

Manager

Dated: September 01, 2021

Results appearing herein relate only to the sample tested

The technical reports is issued errors and omissions exempt and is subject to withdrawal at

## SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

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## **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

## **CNAS-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

## FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

## Industry Canada (IC) — Registration No.:5205A

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

## A2LA (Certification Number:5013.01)

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

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# Test Report Conclusion

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#### 1.0 General Details

#### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 744189 For 3m Anechoic Chamber

## 1.2 Applicant Details

Applicant: XIAMEN COMFORT SCIENCE & TECHNOLOGY GROUP CO., LTD. Address: (5/F) NO.168, QIANPU ROAD, SIMING DISTRICT, XIAMEN, CHINA

Telephone: -Fax: --

## 1.3 Description of EUT

Product: Massage Chair

Manufacturer: XIAMEN OGAWA INTELLIGENT HEALTH EQUIPMENT CO., LTD

Address: (1-3F) No.113 Sunban South Road, Jimei District, Xiamen, China

Trademark: N/A
Model Number: OI-3300J

Additional Model Name OS-3D Otamic LE, OI-3300L, OS-Pro 3D Tecno

Family Model Only the model's name different for the marketing requirement

Statement:

Test Model: OI-3300J

Hardware Version: AM2401-V6.1(V2.4)
Software Version: 526E-29F3CF4C
Serial No.: 3300J21040268

Rating: Input: 110V-120V~, 60Hz, 150W

Modulation Type: GFSK, π/4 DQPSK Operation Frequency: 2402-2480MHz

Channel Separate: 1MHz Channel Number: 79

Antenna Designation PCB antenna with gain 1.3dBi Max (Declared by the applicant)

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1.4 Submitted Sample: 1 pc

1.5 Test Duration

2021-08-11 to 2021-09-01

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty = 6.0dB

Occupied Channel Bandwidth Uncertainty =5%

Conducted Emissions Uncertainty = 3.6dB

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

Terry Tang

The sample tested by

Print Name: Terry Tang

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2.0 Test Equipment	2.0 Test Equipment								
Instrument Type	t Type Manufacturer Model		Serial No.	Date of Cal.	Due Date				
ESPI Test Receiver	R&S	ESPI 3	100379	2021-06-18	2022-06-17				
LISN	R&S	EZH3-Z5	100294	2021-06-18	2022-06-17				
LISN	R&S	EZH3-Z5	100253	2021-06-18	2022-06-17				
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2021-06-18	2022-06-17				
Loop Antenna	EMCO	6507	00078608	2021-06-18	2024-06-17				
Spectrum	R&S	FSIQ26	100292	2021-06-18	2022-06-17				
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2021-07-02	2024-07-01				
Horn Antenna	R&S	BBHA 9120D	9120D-631	2021-07-02	2024-07-01				
Power meter	Anritsu	ML2487A	6K00003613	2021-06-18	2022-06-17				
Power sensor	Anritsu	MA2491A	32263	2021-06-18	2022-06-17				
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2021-07-02	2024-07-01				
9*6*6 Anechoic			N/A	2021-07-02	2022-07-01				
EMI Test Receiver	RS	ESVB	826156/011	2021-06-18	2022-06-17				
EMI Test Receiver	RS	ESH3	860904/006	2021-06-18	2022-06-17				
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2021-06-18	2022-06-17				
Spectrum	HP/Agilent	E4407B	MY50441392	2021-06-18	2022-06-17				
Spectrum	RS	FSP	1164.4391.38	2021-01-16	2022-01-15				
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2021-06-18	2022-06-17				
RF Cable	Zhengdi	7m		2021-06-18	2022-06-17				
RF Switch	EM	EMSW18	060391	2021-06-18	2022-06-17				
Pre-Amplifier	Schwarebeck	BBV9743	#218	2021-06-18	2022-06-17				
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2021-06-18	2022-06-17				
LISN	SCHAFFNER	NNB42	00012	2021-01-06	2022-01-05				

## 2.2 Automation Test Software

#### For Conducted Emission Test

Name	Version
EZ-EMC	Ver.EMC-CON 3A1.1

## For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

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#### 3.0 Technical Details

## 3.1 Summary of test results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	PASS	Complies
FCC Part 15, Paragraph 15.209	Radiated Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	PASS	Complies

#### 3.2 Test Standards

FCC Part 15 Subpart C, Paragraph 15.249, ANSI C63.4:2014 and ANSI C63.10:2013

## 4.0 EUT Modification

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

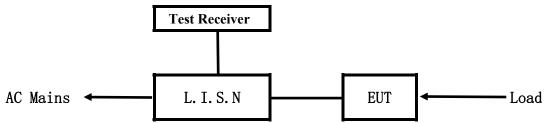
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#### **5.0** Power Line Conducted Emission Test

### 5.1 Schematics of the test

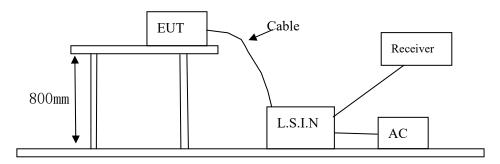


**EUT: Equipment Under Test** 

## 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum from 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10-2013.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



## 5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

79 channels are provided to the EUT

### A. EUT

Device	Manufacturer	Model	FCC ID
Massage Chair	XIAMEN OGAWA INTELLIGENT HEALTH EQUIPMENT CO., LTD.	OI-3300J, OS-3D Otamic LE, OI-3300L, OS-Pro 3D Tecno	YMX-0I3300J

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#### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

## C. Peripherals

Device	Manufacturer	Model	Rating
N/A			

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency	Limits (d	lB μ V)			
(MHz)	Quasi-peak Level	Average Level			
$0.15 \sim 0.50$	66.0~56.0*	56.0~46.0*			
$0.50 \sim 5.00$	56.0	46.0			
5.00 ~ 30.00	60.0	50.0			

Notes: 1. \*Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

#### 5.6 Test Results:

Pass

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## A: Conducted Emission on Live Terminal (150kHz to 30MHz)

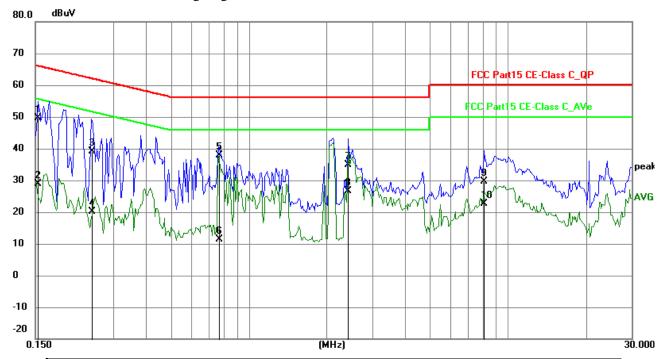
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	39.92	9.78	49.70	65.79	-16.09	QP	Р
2	0.1539	19.03	9.78	28.81	55.79	-26.98	AVG	Р
3	0.2475	29.38	9.75	39.13	61.84	-22.71	QP	Р
4	0.2475	10.46	9.75	20.21	51.84	-31.63	AVG	Р
5	0.7662	28.20	9.78	37.98	56.00	-18.02	QP	Р
6	0.7662	1.53	9.78	11.31	46.00	-34.69	AVG	Р
7	2.4119	24.96	9.82	34.78	56.00	-21.22	QP	Р
8	2.4119	16.74	9.82	26.56	46.00	-19.44	AVG	Р
9	8.0700	19.67	10.06	29.73	60.00	-30.27	QP Q	Р
10	8.0700	12.52	10.06	22.58	50.00	-27.42	AVG	Р

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## B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

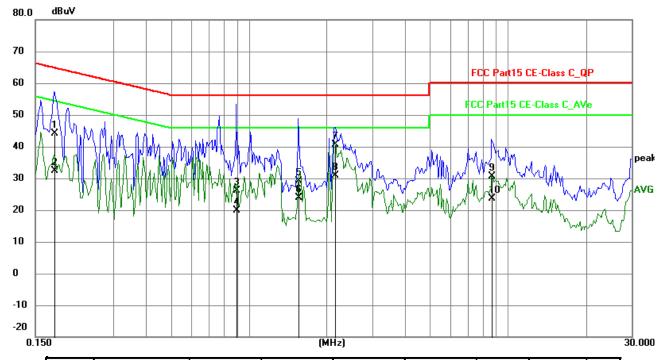
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1773	34.43	9.77	44.20	64.61	-20.41	QP	Р
2	0.1773	22.57	9.77	32.34	54.61	-22.27	AVG	Р
3	0.8949	16.28	9.79	26.07	56.00	-29.93	QP	Р
4	0.8949	10.01	9.79	19.80	46.00	-26.20	AVG	Р
5	1.5540	19.34	9.80	29.14	56.00	-26.86	QP	Р
6	1.5540	14.18	9.80	23.98	46.00	-22.02	AVG	Р
7	2.1546	30.87	9.81	40.68	56.00	-15.32	Q Q	Р
8	2.1546	21.15	9.81	30.96	46.00	-15.04	AVG	Р
9	8.6511	20.60	10.09	30.69	60.00	-29.31	QP Q	Р
10	8.6511	13.52	10.09	23.61	50.00	-26.39	AVG	Р

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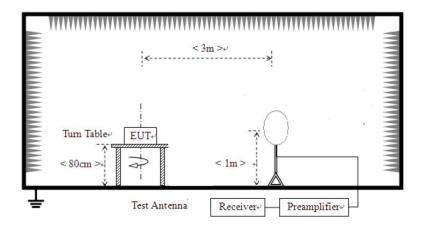


#### **6** Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz (Note: for Fundamental frequency radiated emission measurement, RBW=3MHz, VBW=10MHz). Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) The antenna polarization: Vertical polarization and Horizontal polarization.

### **Block diagram of Test setup**

For radiated emissions from 9kHz to 30MHz



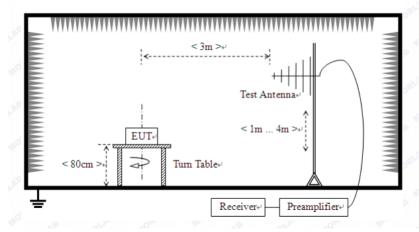
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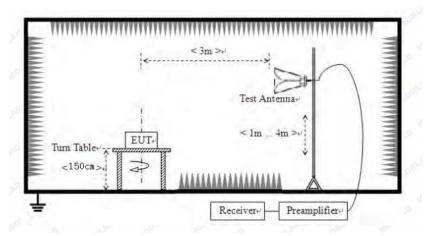
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For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition

  Same as section 5.4 of this report.

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#### 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

## A FCC Part 15 Subpart C Paragraph 15.249(a) Limit

Fundamental Frequency	Field Stre	d Strength of Fundamental (3m)			trength of Harmo	nics (3m)
(MHz)	mV/m	dBuV/m		uV/m	dBuV/m	
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)

Note:

- 1. RF Field Strength (dBuV) = 20 log RF Voltage (uV)
- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

## B. Frequencies in restricted band are complied to limit on Paragraph 15.209.

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. All scanning using PK detector. And the final emission level was get using QP detector for frequency range from 30-1000MHz.As to 1G-25G, the final emission level got using PK. For fundamental measurement, PK detector used.
- 5. The two modulation modes of GFSK and  $\pi/4$  DQPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.

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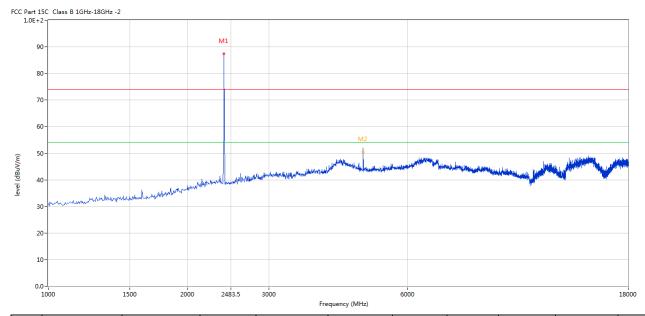


## 6.5 Test result

## A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2402MHz

#### Horizontal



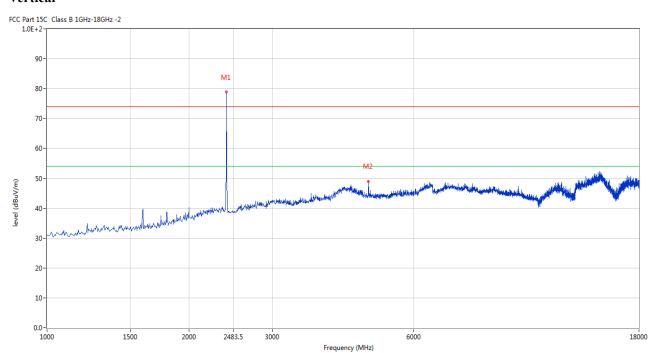
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402.149	87.32	-3.57	114.0	-26.68	Peak	289.00	100	Horizontal	Pass
2	4802.799	53.97	3.12	74.0	-20.03	Peak	327.00	100	Horizontal	Pass
2**	4802.799	50.45	3.12	54.0	-3.55	AV	327.00	100	Horizontal	Pass

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## Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.149	78.84	-3.57	114.0	-35.16	Peak	294.00	100	Vertical	Pass
2	4802.799	48.96	3.12	74.0	-25.04	Peak	343.00	100	Vertical	Pass

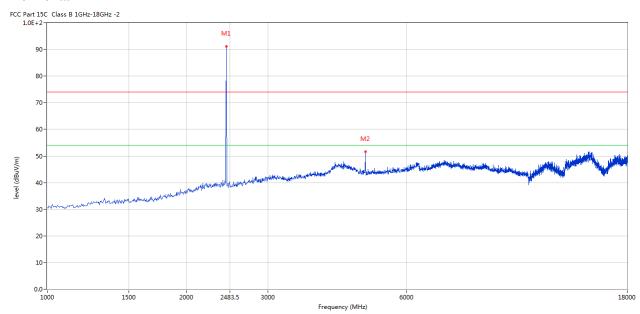
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Please refer to the following test plots for details: Middle Channel-2441MHz

#### Horizontal



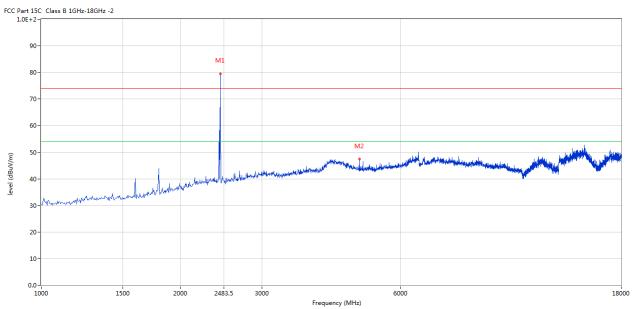
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2440.390	91.11	-3.57	114.0	-22.89	Peak	262.00	100	Horizontal	Pass
2	4883.529	51.52	3.20	74.0	-22.48	Peak	360.00	100	Horizontal	Pass

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## Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2440.390	79.47	-3.57	114.0	-34.53	Peak	140.00	100	Vertical	Pass
2	4879.280	47.38	3.20	74.0	-26.62	Peak	283.00	100	Vertical	Pass

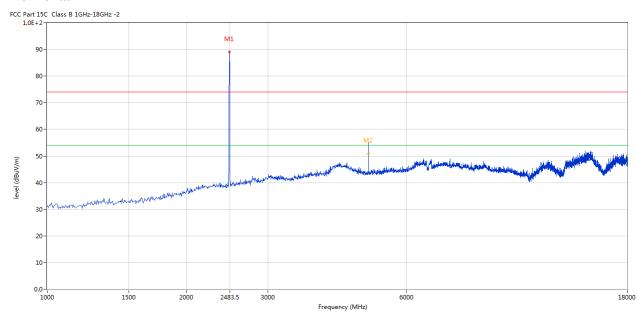
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Please refer to the following test plots for details: High Channel-2480MHz

#### Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(0)	(cm)		
1	2479.630	89.05	-3.57	114.0	-24.95	Peak	310.00	100	Horizontal	Pass
2	4960.010	55.58	3.36	74.0	-18.42	Peak	315.00	100	Horizontal	Pass
2**	4960.010	50.78	3.36	54.0	-3.22	AV	315.00	100	Horizontal	Pass

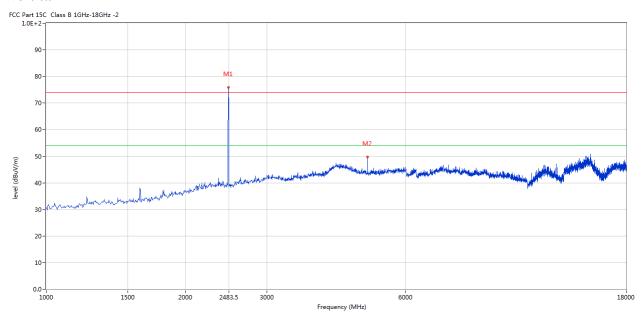
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#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2479.630	75.92	-3.57	114.0	-38.08	Peak	264.00	100	Vertical	Pass
2	4960.010	49.75	3.36	74.0	-24.25	Peak	297.00	100	Vertical	Pass

Note: (2) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

- (3) Margin=Emission-Limits
- (4) According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting
- (5) For emission above 18GHz and Below 30MHz, It is only the floor noise. No necessary to take down.
- (6) the measured PK value less than the AV limit.

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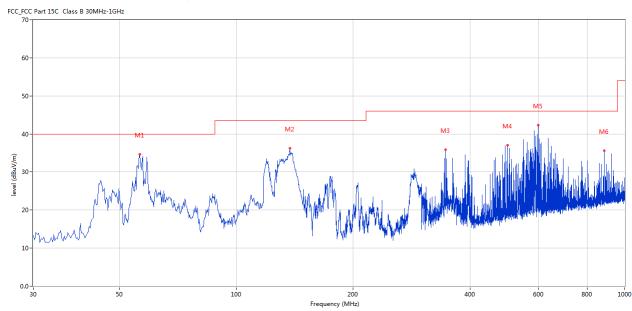


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	56.426	34.73	-12.15	40.0	-5.27	Peak	202.00	100	Horizontal	Pass
2	137.401	36.21	-17.23	43.5	-7.29	Peak	72.00	100	Horizontal	Pass
3	346.141	35.91	-9.48	46.0	-10.09	Peak	10.00	100	Horizontal	Pass
4	500.090	37.10	-6.91	46.0	-8.90	Peak	44.00	100	Horizontal	Pass
5	597.793	42.29	-5.10	46.0	-3.71	Peak	123.00	100	Horizontal	Pass
6	886.538	35.61	-2.07	46.0	-10.39	Peak	126.00	100	Horizontal	Pass

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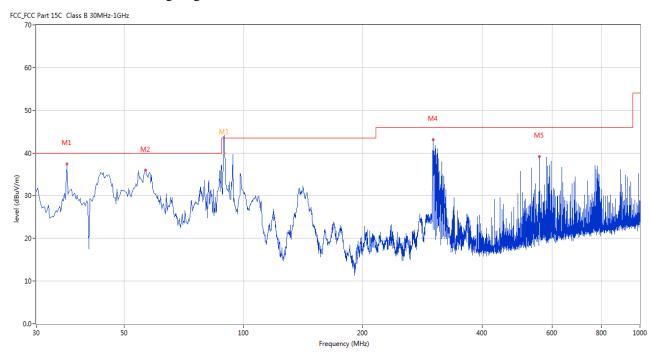


## Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	66.260	26.08	-14.08	40.0	-13.92	Peak	77.00	159	Vertical	Pass
1*	66.260	34.29	-14.08	40.0	-5.71	QP	77.00	159	Vertical	Pass
2	86.246	35.96	-16.18	40.0	-4.04	Peak	210.00	100	Vertical	Pass
3	118.005	37.60	-14.93	43.5	-5.90	Peak	294.00	100	Vertical	Pass
4	209.405	39.36	-13.60	43.5	-4.14	Peak	294.00	100	Vertical	Pass
5	767.743	42.40	-3.20	46.0	-3.60	Peak	286.00	100	Vertical	Pass

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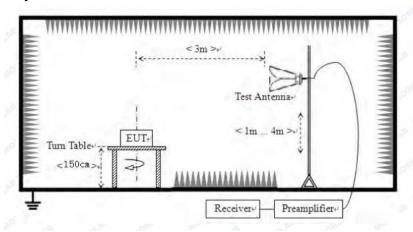


### 7. Band Edge

#### 7.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

## 7. 2 Radiated Test Setup



For the actual test configuration, please refer to the related items – Photos of Testing

## 7.3 Configuration of The EUT

Same as section 5.3 of this report

## 7.4 EUT Operating Condition

Same as section 5.4 of this report.

## 7.5 Band Edge Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

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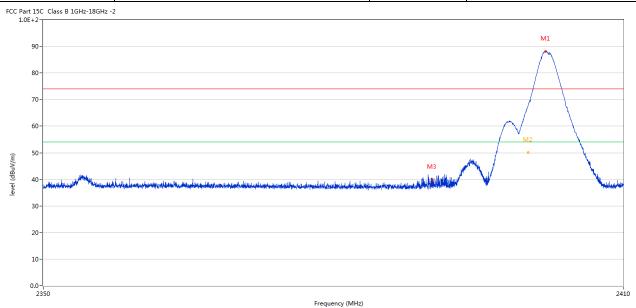
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### 7.6 Test Result

Product:	Massage Chair	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
2	2400.042	67.55	-3.57	74.0	-6.45	Peak	285.00	100	Horizontal	Pass
2**	2400.042	50.14	-3.57	54.0	-3.86	AV	285.00	100	Horizontal	Pass
3	2390.070	39.77	-3.53	74.0	-34.23	Peak	178.00	100	Horizontal	Pass

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I	Product:		Massage	Chair		Detector		Ve	rtical	
	Mode	K	eeping Tra	nsmitting	Te	est Voltage		12	0V~	
Te	mperature		24 deg	g. C,	]	Humidity		56%	% RH	
Te	est Result:		Pas	S						
Part 1 1.0E+	.5C Class B 1GHz-18GHz	-2								
90										
91	0-							N	11	
80	0-								<b>^</b>	
70	0-								1	
60	0-								_\	
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30 10 0.0	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	over Limit	Detector	(o)	(cm)	ANT	2410 Verd

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Product:	Product: Massage Chair  Mode Keeping Transmitting  Temperature 24 deg. C,		: Massage Chair Polarity			Horizontal			
Mode				Test Voltage Humidity		ge 120V~			
Temperatur						5	66% RH		
Test Result: Pass		iss							
Part 15C Class B 1GH: 1.0E+2- 90- 80- 70- 60- 50- 40- 30- 20-	13GHz -2		M		designation of the second of t		ear, poi likki i , ni dendare, a	and what had the state of the s	phylonius (
0.0- 2470			2483	.5 Frequency (MHz)					250
	cv Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verd
lo. Frequen	y Results			1	1			I	VCIC
No. Frequen	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		VOIC
·	(dBuV/m)	(dB) -3.57	(dBuV/m) 74.0	Limit (dB) -17.15	Peak	(o) 233.00	(cm) 100	Horizontal	Pass

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]	Product:		Massage	Chair		Detector		Vei	rtical	
	Mode Keeping Transmitting		nsmitting	Tes	st Voltage		120V~			
Temperature 24 deg. C,		g. C,	Н	Iumidity		56% RH				
Te	Test Result: Pass		S							
FCC Part 1	L5C Class B 1GHz-18GHz 2-	-2								
9	0-									
8	0-									
7	0-									
			<i>_</i>							
6	0-									
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(ww/qBp/w)   4   3   3   2   2   1   1   2   2   3   3   3   3   3   3   3   3	0-	Results	Factor			Detector	Table	Height	ANT	2500 Verdict
(w/NRp) laval 3 2 1 0.	0-		Factor (dB)		; Frequency (MHz)					

Note: 1. The PK emission level less than the AV limit. No necessary to record the AV emission level.

2. The two modulation modes of GFSK and  $\pi$  /4 DQPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.

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## 8.0 Antenna Requirement

## **Applicable Standard**

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a PCB antenna with gain 1.3dBi Max. It fulfills the requirement of this section.

Test Result: Pass

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9.0 20dB Bandwidt	h Measurement				
GFSK Modulation	1				
Product:	Product: Massage Chair		Test Mode:	Keep tra	ansmitting
Mode	Mode Keeping Transmitting		Test Voltage	12	20V~
Temperature 24 deg. C,		eg. C,	Humidity	569	% RH
Test Result: Pass		ss	Detector	]	PK
20dB Bandwidth	888.0	0kHz			
Ref 0 dBm	* Att 1	*RBW 30 *VBW 100 0 dB SWT 5 m	kHz 2 ndB [T	.0000000000 kHz [Tl nd8]	A
1 PK MAXH 20			Temp 2 <b>↑</b> T2	-28.88 dBm .401568000 GHz [TI ndB] -29.03 dBm .402456000 GHz	
50				~~	3DB
70				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
80					

Date: 1.SEP.2021 09:15:02

Center 2.402 GHz

-100

300 kHz/

Span 3 MHz

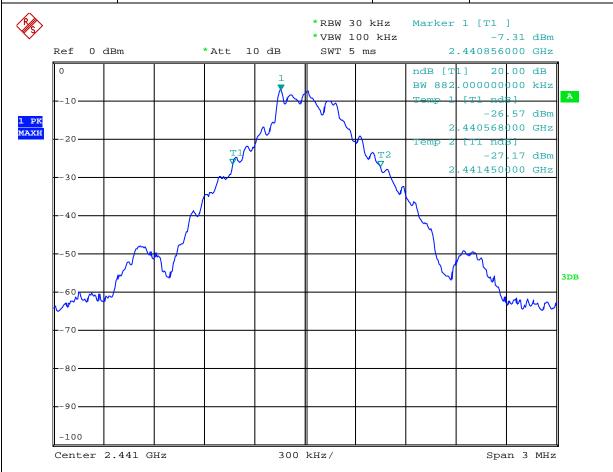
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GFSK Modulation					
Product:	Massage Chair	Test Mode:	Keep transmitting		
Mode	Keeping Transmitting	Test Voltage	120V~		
Temperature	24 deg. C,	Humidity	56% RH		
Test Result:	Pass	Detector	PK		
20dB Bandwidth	882.00kHz				



Date: 1.SEP.2021 09:19:07

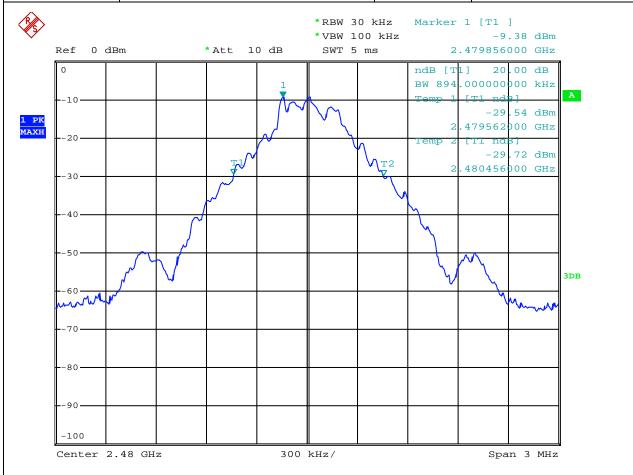
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GFSK Modulati	on		
Product:	Massage Chair	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	120V~
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	894.00kHz		



Date: 1.SEP.2021 09:24:26

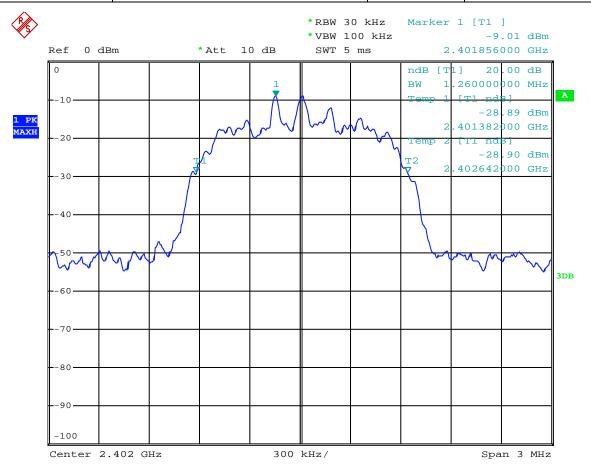
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π/4 DQPSK Modulation					
Product:	Massage Chair	Test Mode:	Keep transmitting		
Mode	Keeping Transmitting	Test Voltage	120V~		
Temperature	24 deg. C,	Humidity	56% RH		
Test Result:	Pass	Detector	PK		
20dB Bandwidth	1.260MHz				



Date: 1.SEP.2021 09:45:07

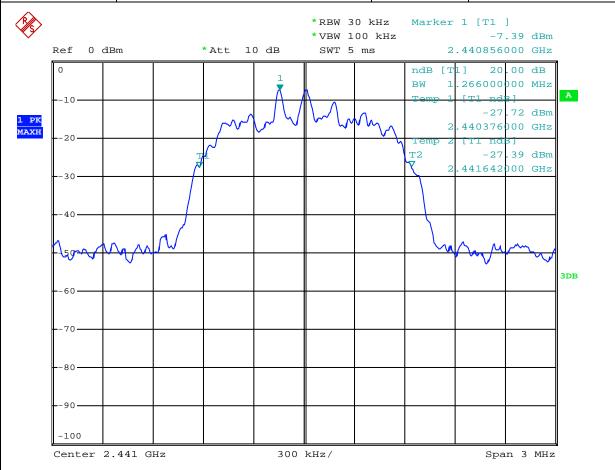
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π/4 DQPSK Modulation					
Product:	Massage Chair	Test Mode:	Keep transmitting		
Mode	Keeping Transmitting	Test Voltage	120V~		
Temperature	24 deg. C,	Humidity	56% RH		
Test Result:	Pass	Detector	PK		
20dB Bandwidth	1.266MHz				



Date: 1.SEP.2021 09:39:50

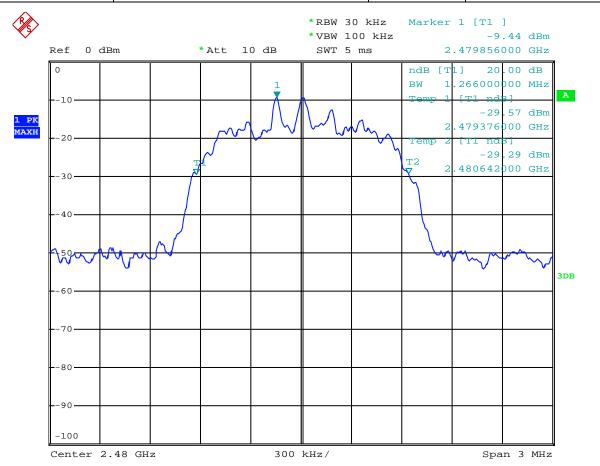
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π/4 DQPSK Modulation					
Product:	Massage Chair	Test Mode:	Keep transmitting		
Mode	Keeping Transmitting	Test Voltage	120V~		
Temperature	24 deg. C,	Humidity	56% RH		
Test Result:	Pass	Detector	PK		
20dB Bandwidth	1.266MHz				



Date: 1.SEP.2021 09:34:52

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### 10.0 FCC ID Label

#### FCC ID: YMX-0I3300J

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### Mark Location:



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#### 11.0 Photo of testing

#### 11.1 Conducted test View--



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## Radiated emission test view



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#### 11.2 Photographs-EUT





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Photographs-EUT

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Photographs-EUT

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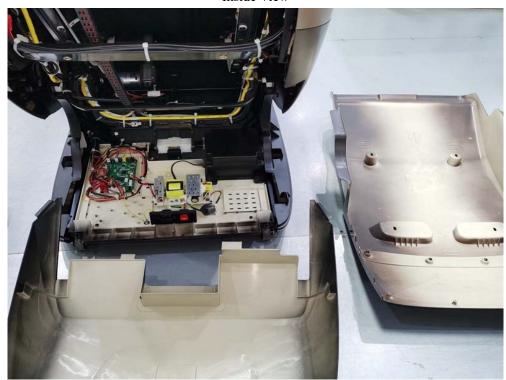
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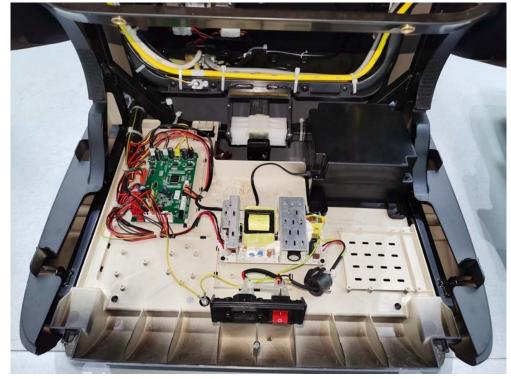
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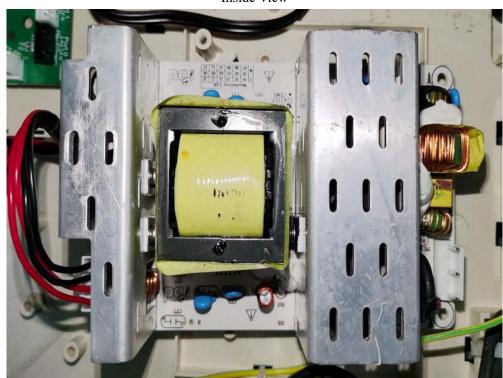
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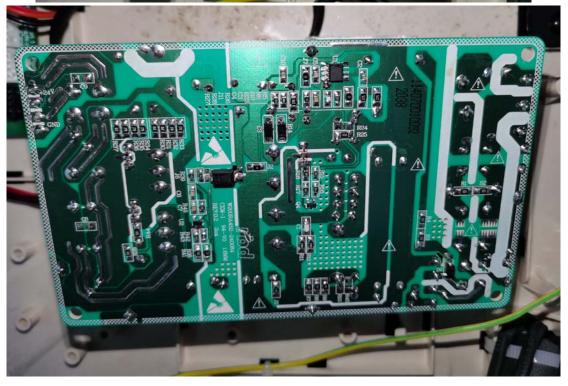
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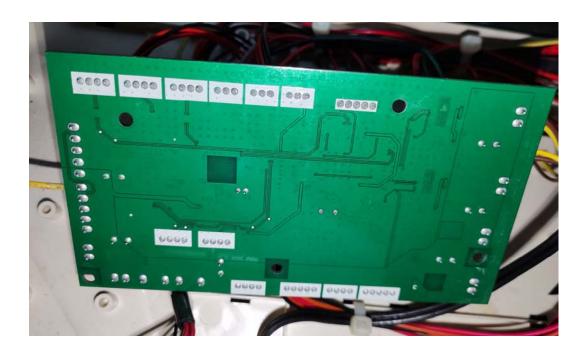
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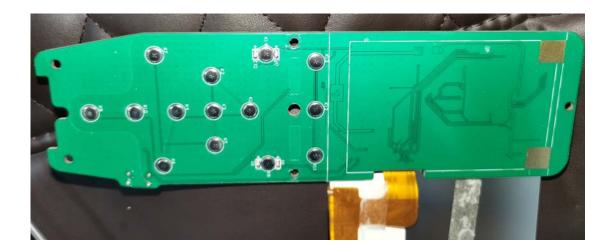
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Inside View





-- End of the report--

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