

Test Report

Applicant: TZUMI Electronics,LLC

Product Name: FITRX PRO MASSAGE GUN

Brand Name: FITRX, TZUMI, PROFIT,FLEX,ICONIC

Model No.: 8034,8152,7610,8181,8182,8299,8405,7773

FCC ID: 2AON7-7610

Date of Receipt : Jan.02,2021

Date of Test: Jan.15,2021

Date of Report: Jun.03,2021

Prepared by: Shenzhen Most Technology Service Co., Ltd.

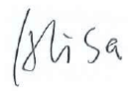


The testing has been performed on the submitted samples and found in compliance with the council FCC Rules and Regulations Part 15 Subpart B.

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

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TEST REPORT VERIFICATION

Report Number	MTEC21081811	
Applicant	TZUMI Electronics,LLC	
	16 EAST 34TH STREET 16TH FLOOR, New York 10016, United States	
Manufacturer	Wenzhou Songling healthcare equipment Co., Ltd	
	No. 1320-1328 Wanxiang Road, Huangyang village, Wanquan Town, Pingyang County, Wenzhou City, Zhejiang Province. China. zip code:325400	
Product	Product Name	FITRX PRO MASSAGE GUN
	Model No.	8034
	Power Supply	DC 11.1V by Battery Input:110-240V ~, 0.4A ,50/60Hz Output : 5V, 2A
Test Result	The EUT was found compliant with the requirement(s) of the standards.	
Standard	FCC Rules and Regulations Part 15 Subpart B Class B.	
<p>*Note</p> <p>The above device has been tested by Shenzhen Most Technology Service 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 record, data evaluation & Equipment Under Test (EUT) configurations represented are contained in this test report and Shenzhen Most Technology Service Co., Ltd. Is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the requirement of the above standards.</p> <p>This report applies to above tested sample only. This report shall not be reproduced except in full, without written approval of Shenzhen Most Technology Service Co., Ltd., this document may be altered or revised by Shenzhen Most Technology Service Co., Ltd., personal only, and shall be noted in the revision of the document.</p>		
Prepared by		
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Reviewed by		
	Sunny Deng(Engineer)	
Approved by		
	Yvette Zhou(Manager)	

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	FITRX PRO MASSAGE GUN
Model Number	:	8034,8152,7610,8181,8182,8299,8405,7773
Remark	:	Used 8034does all tests

1.2. Operational Mode(s) of EUT

Order Number	:	Test Mode(s)
1	:	Running
2	:	Charging

1.3. Test Voltage(s) of EUT

Order Number	:	Test Voltage(s)
1	:	DC 11.1V by Battery
2	:	DC 5V by Adapter

2. LABORATORY INFORMATION

2.1. Laboratory Name

Shenzhen Most Technology Service Co., Ltd.

2.2. Location

No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China

2.3. Test facility

3m Anechoic Chamber	: Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
Shielding Room	: Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
EMC Lab.	: Accredited by TUV Rheinland Shenzhen Audit Report: UA 50149851 Mar. 12, 2009 Accredited by Industry Canada Registration Number: 7103A-1 Oct. 22, 2012 Accredited by TIMCO Registration Number: Q1460 March 28, 2010

2.4. Measurement Uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Disturbance Test	1.25dB
2.	Uncertainty for Radiated Disturbance Test	3.15dB

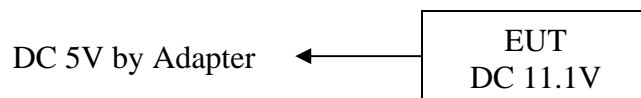
3. SUMMARY OF TEST RESULTS

EMISSION			
Test Item	Standard	Limits	Results
Conducted disturbance at mains terminals	FCC Part 15	Class B	PASS
Radiated disturbance	FCC Part 15	Class B	PASS
N/A is an abbreviation for Not Applicable.			

4. BLOCK DIAGRAM OF TEST SETUP

The equipments are installed test to meet ANSI C63.4:2014 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application. EUT was tested in normal configuration (Please See following Block diagrams)

4.1. Block Diagram of connection between EUT and simulation-EMI



(EUT: FITRX PRO MESSAGE GUN)

5. TEST INSTRUMENT USED

5.1. For Conducted Disturbance at Mains Terminals Emission Test

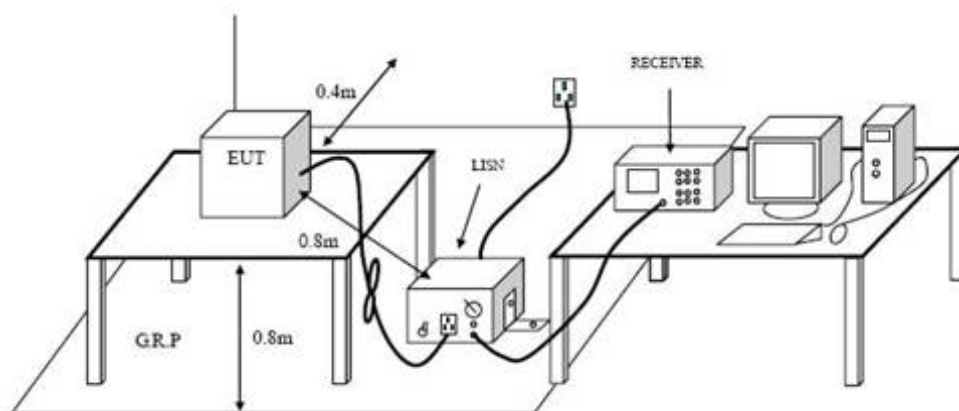
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100492	Mar. 06, 20	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	100093	Mar. 06, 20	1 Year
3.	Coaxial Switch	Anritsu Corp	MP59B	6200283933	Mar. 06, 20	1 Year
4.	Terminator	Hubersuhner	50Ω	No.1	Mar. 06, 20	1 Year
5.	RF Cable	SchwarzBeck	N/A..	No.1	Mar. 06, 20	1 Year

5.2. For Radiation Test (In Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI	101202	Mar. 06, 20	1 Year
2.	Bilog Antenna	Sunol	JB3	A121206	Mar. 06, 20	1 Year
3.	Cable	Resenberger	N/A.	NO.1	Mar. 06, 20	1 Year
4.	Cable	SchwarzBeck	N/A..	NO.2	Mar. 06, 20	1 Year
5.	Cable	SchwarzBeck	N/A.	NO.3	Mar. 06, 20	1 Year
6.	DC Power Filter	DuoJi	DL2×30B	N/A.	N/A..	N/A..
7.	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A.	N/A.	N/A.
8.	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A.	N/A.	N/A.

6. CONDUCTED DISTURBANCE AT MAINS TERMINALS TEST

6.1. Configuration of Test System



6.2. Test Standard

FCC Subpart 15 B Section 15.107

6.3. Power Line Conducted Disturbance at Mains Terminals Limit

Frequency (MHz)	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

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

2. The lower limit shall apply at the transition frequencies.

6.4. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on conducted Disturbance test.

The bandwidth of test receiver is set at 9 kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 6.5.

6.5. Conducted Disturbance at Mains Terminals Test Results

Test Results: PASS

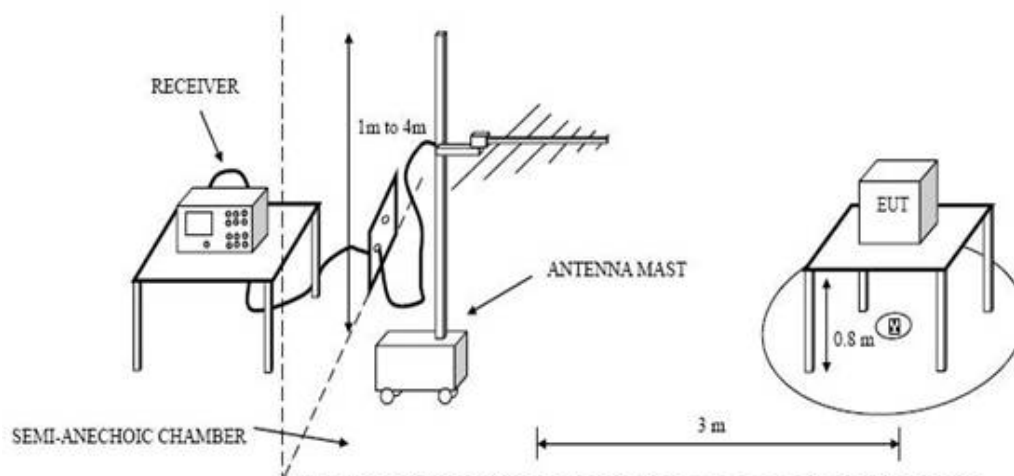
If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Emission Level= Correct Factor + Reading Level.

The test data and the scanning waveform are attached within Appendix I.

7. RADIATED DISTURBANCE TEST

7.1. Configuration of Test System



7.2. Test Standard

FCC Subpart 15 B Section 15.109

7.3. Radiated Disturbance Limit

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dB μ V/m)	
30 ~ 88	3	40.0	
88~216	3	43.5	
216~960	3	46.0	
960 ~ 1000	3	54.0	
1000-18000	3	74(Peak)	54(AV)

Note: 1. Emission level (dB) μ V = 20 log Emission level μ V/m

2. The lower limit shall apply at the transition frequencies.

3. Distance refers to the distance in meters between the test antenna and the closed point of any part of the EUT.

7.4. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on Radiated Disturbance test.

The bandwidth setting on the test receiver is 120 kHz.

The frequency range from 30MHz to 1000MHz is checked. The test result are reported on Section 7.5

7.5. Radiated Disturbance Test Results

Test Results: PASS

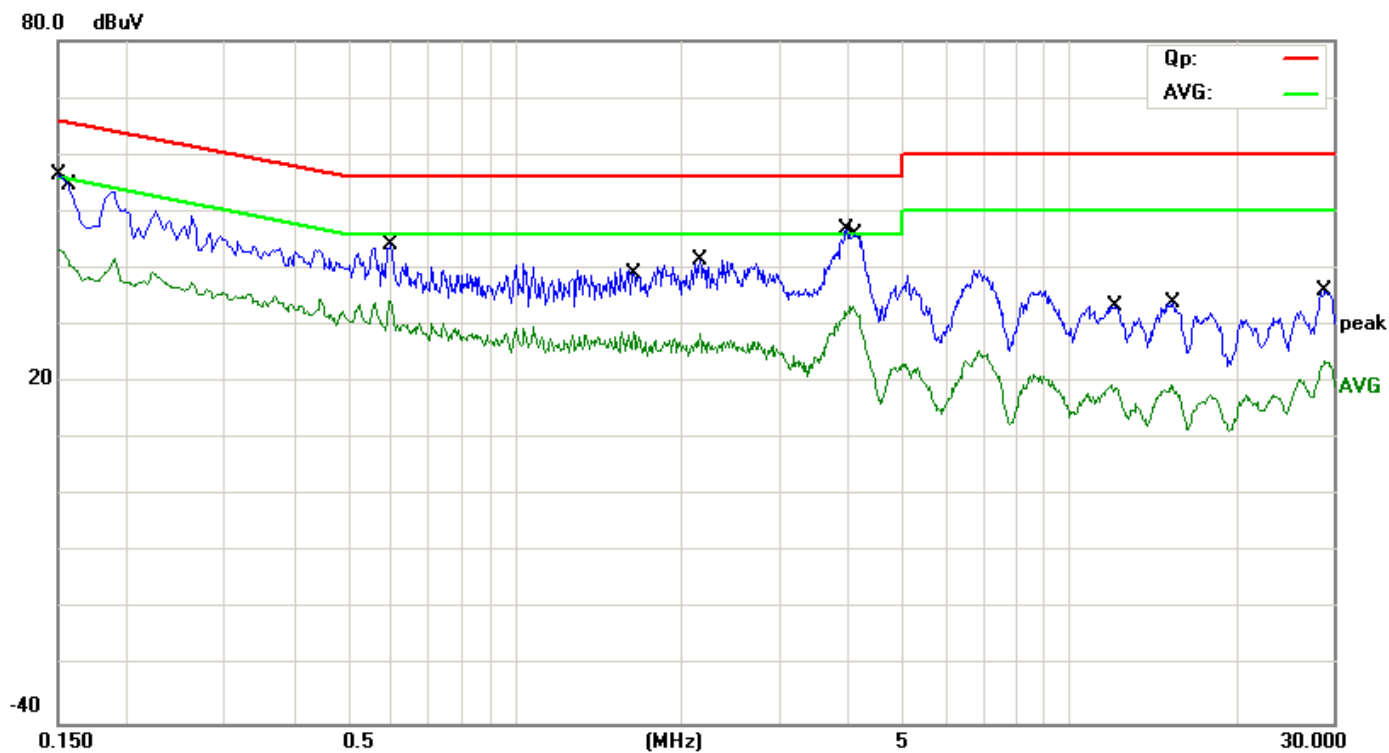
Emission Level= Correct Factor + Reading Level.

All reading are Quasi-Peak values.

The test data and the scanning waveform are attached within Appendix II.

APPENDIX I

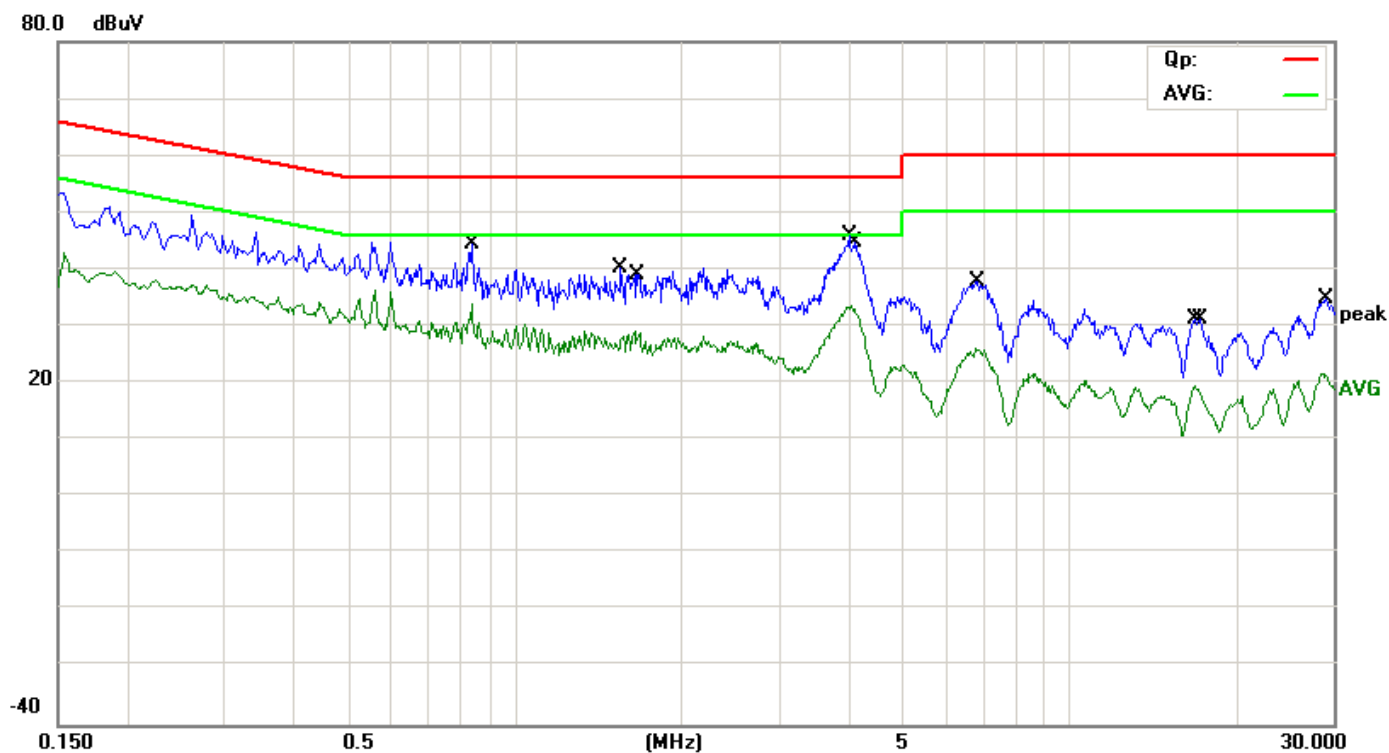
EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Charging	Phase:	L
Test by:	leo	Power:	DC 5V by Adapter
Temperature: / Humidity	19.0°C / 53.0%	Test date:	2021-01-15



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	33.73	9.60	43.33	56.00	-12.67	AVG	
2		0.1582	43.95	9.60	53.55	65.56	-12.01	QP	
3		0.5980	34.64	9.59	44.23	56.00	-11.77	QP	
4		0.5980	24.74	9.59	34.33	46.00	-11.67	AVG	
5		1.6380	19.17	9.60	28.77	46.00	-17.23	AVG	
6		2.1620	31.86	9.60	41.46	56.00	-14.54	QP	
7	*	3.9820	37.24	9.62	46.86	56.00	-9.14	QP	
8		4.0900	23.68	9.62	33.30	46.00	-12.70	AVG	
9		11.9820	9.92	9.69	19.61	50.00	-30.39	AVG	
10		15.3980	24.20	9.70	33.90	60.00	-26.10	QP	
11		29.0100	26.13	9.77	35.90	60.00	-24.10	QP	
12		29.0100	13.88	9.77	23.65	50.00	-26.35	AVG	

*:Maximum data x:Over limit !:over margin

EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Charging	Phase:	N
Test by:	leo	Power:	DC 5V by Adapter
Temperature: / Humidity	19.0°C / 53.0%	Test date:	2021-01-15

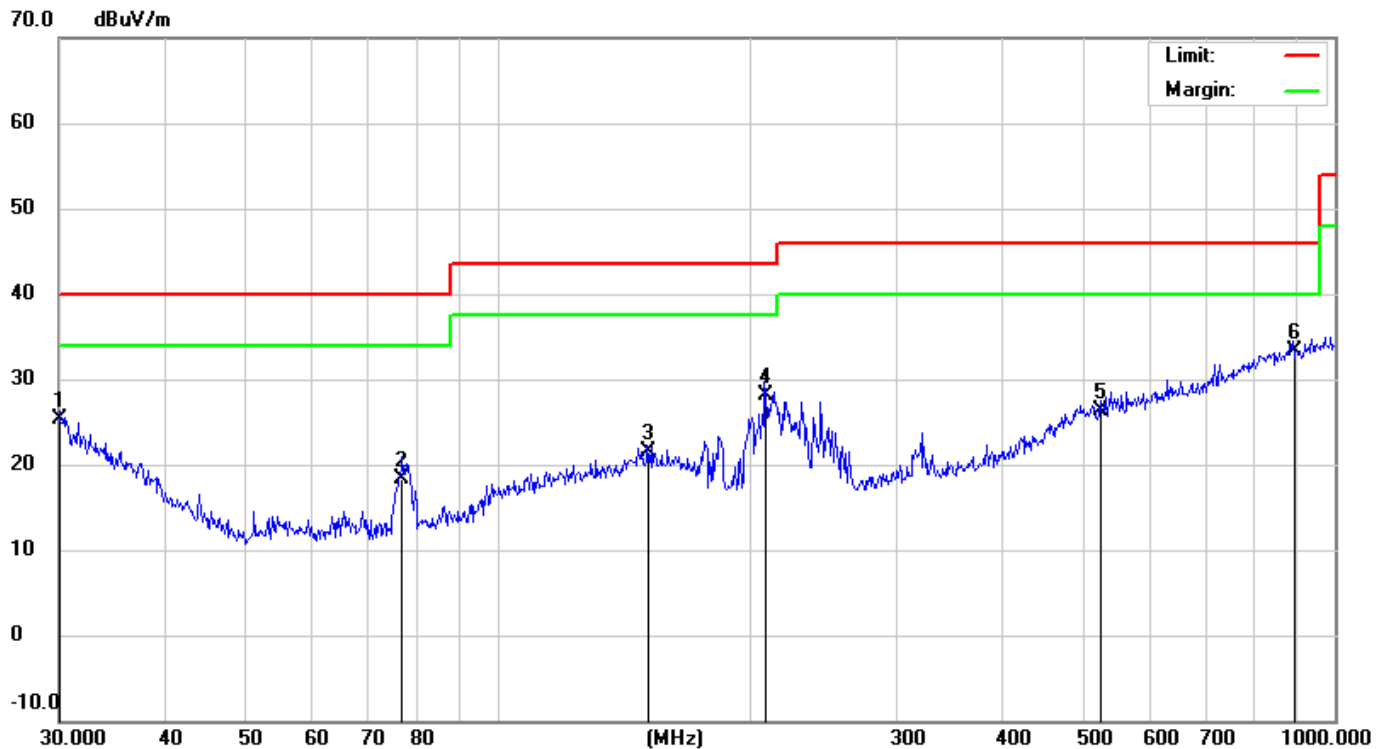


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.8380	34.84	9.60	44.44	56.00	-11.56	QP	
2		0.8380	24.29	9.60	33.89	46.00	-12.11	AVG	
3		1.5580	30.80	9.60	40.40	56.00	-15.60	QP	
4		1.6460	19.67	9.60	29.27	46.00	-16.73	AVG	
5	*	4.0180	36.20	9.62	45.82	56.00	-10.18	QP	
6		4.0580	24.04	9.62	33.66	46.00	-12.34	AVG	
7		6.7820	16.48	9.65	26.13	50.00	-23.87	AVG	
8		6.8060	28.33	9.65	37.98	60.00	-22.02	QP	
9		16.8580	9.91	9.71	19.62	50.00	-30.38	AVG	
10		17.2420	21.66	9.71	31.37	60.00	-28.63	QP	
11		28.8020	11.99	9.77	21.76	50.00	-28.24	AVG	
12		29.1060	24.95	9.77	34.72	60.00	-25.28	QP	

*:Maximum data x:Over limit !:over margin

APPENDIX II

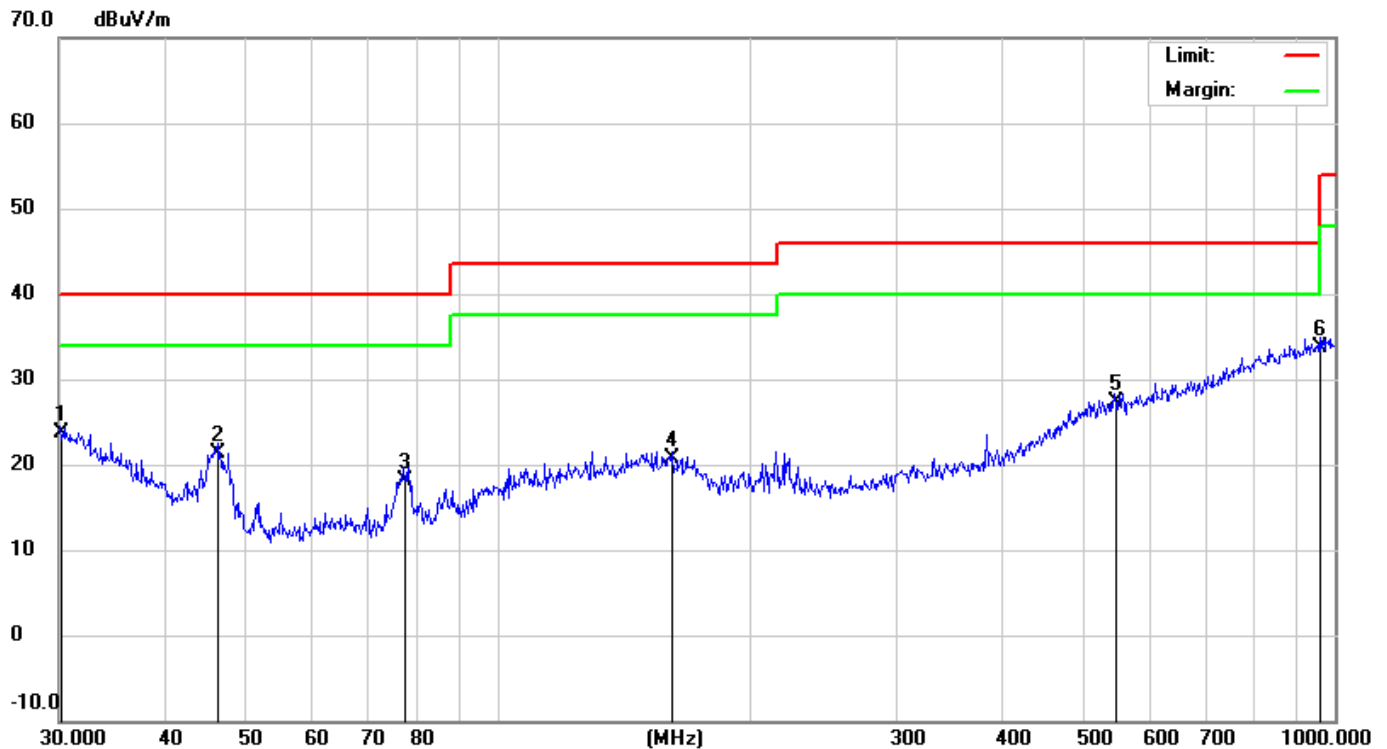
EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Running	Polarization:	Horizontal
Test by:	Peter	Power:	DC 11.1V by Battery
Temperature: / Humidity	24.0°C/53.0%	Test date:	2021-01-15



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		30.0000	4.46	20.90	25.36	40.00	-14.64	QP		
2		77.0505	8.48	9.86	18.34	40.00	-21.66	QP		
3		151.0666	3.85	17.66	21.51	43.50	-21.99	QP		
4		208.5803	13.20	14.96	28.16	43.50	-15.34	QP		
5		524.5541	3.36	22.97	26.33	46.00	-19.67	QP		
6	*	890.7278	4.48	28.90	33.38	46.00	-12.62	QP		

*:Maximum data x:Over limit !:over margin

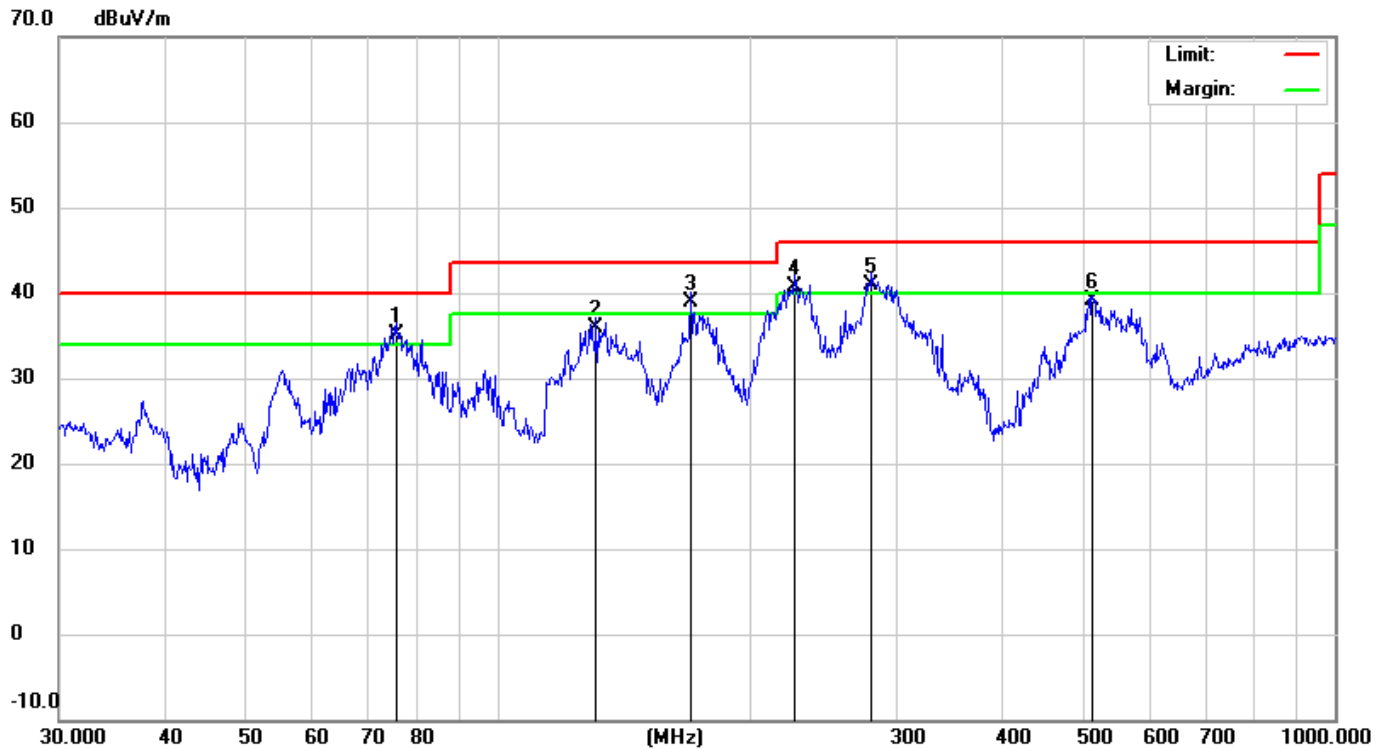
EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Running	Polarization:	Vertical
Test by:	Peter	Power:	DC 11.1V by Battery
Temperature: / Humidity	24.0°C/53.0%	Test date:	2021-01-15



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		30.1054	2.85	20.83	23.68	40.00	-16.32	QP			
2		46.3402	11.46	9.86	21.32	40.00	-18.68	QP			
3		77.3212	8.15	9.89	18.04	40.00	-21.96	QP			
4		161.4742	3.36	17.25	20.61	43.50	-22.89	QP			
5		545.1826	4.08	23.20	27.28	46.00	-18.72	QP			
6	*	958.7943	4.12	29.59	33.71	46.00	-12.29	QP			

*:Maximum data x:Over limit !:over margin

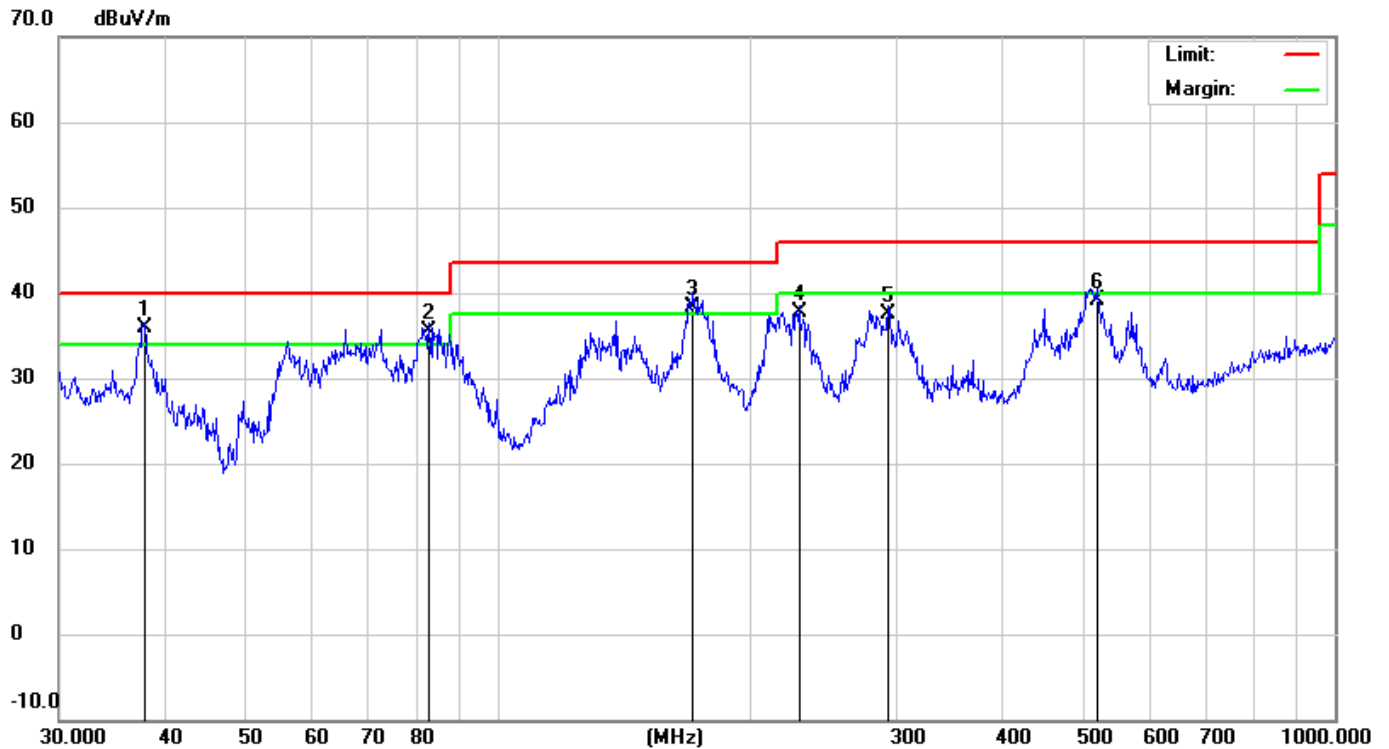
EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Charging	Polarization:	Horizontal
Test by:	Peter	Power:	DC 5V by Adapter
Temperature: / Humidity	24.0°C/53.0%	Test date:	2021-01-15



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	!	75.7113	25.41	9.76	35.17	40.00	-4.83	QP		
2		131.2965	19.78	16.17	35.95	43.50	-7.55	QP		
3	*	170.1947	21.89	16.96	38.85	43.50	-4.65	QP		
4	!	226.8936	26.32	14.45	40.77	46.00	-5.23	QP		
5	!	280.0237	26.15	14.82	40.97	46.00	-5.03	QP		
6		513.6331	16.20	22.85	39.05	46.00	-6.95	QP		

*:Maximum data x:Over limit !:over margin

EUT:	FITRX PRO MESSAGE GUN	M/N:	8034
Mode:	Charging	Polarization:	Vertical
Test by:	Peter	Power:	DC 5V by Adapter
Temperature: / Humidity	24.0°C/53.0%	Test date:	2021-01-15



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	37.9449	20.59	15.32	35.91	40.00	-4.09	QP			
2	!	82.9384	25.46	10.04	35.50	40.00	-4.50	QP			
3	!	171.3925	21.48	16.92	38.40	43.50	-5.10	QP			
4		229.2930	23.36	14.38	37.74	46.00	-8.26	QP			
5		293.0842	22.20	15.26	37.46	46.00	-8.54	QP			
6		520.8881	16.23	22.93	39.16	46.00	-6.84	QP			

*:Maximum data x:Over limit !:over margin

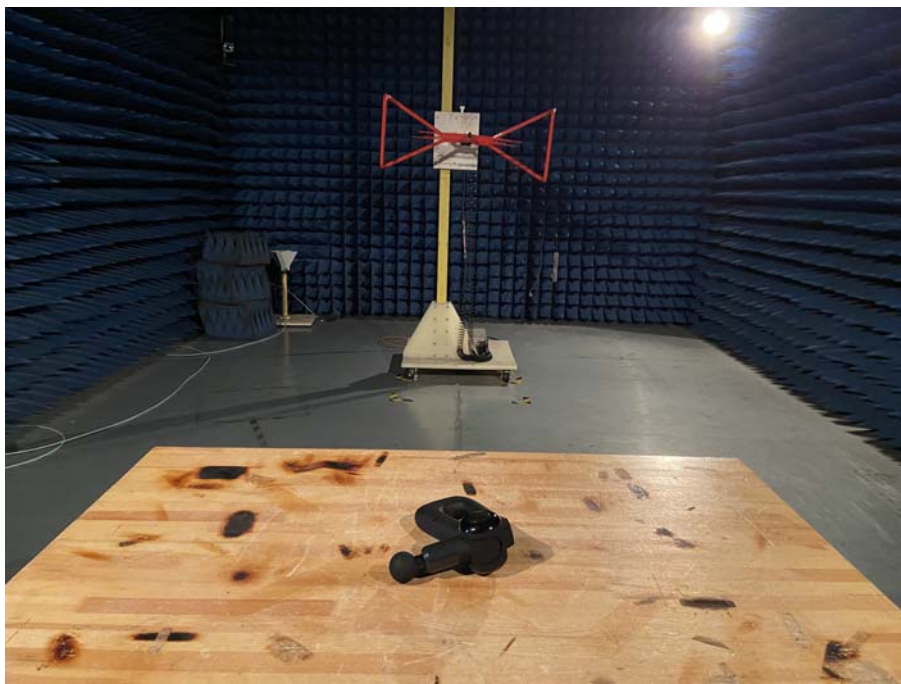
APPENDIX III

(Test Photos of the EUT)

Conducted Test Setup Photograph



Radiated Test Setup Photograph



APPENDIX IV

(Photos of the EUT)

Figure 1
General Appearance of the EUT



Figure 2
General Appearance of the EUT



Figure 3
General Appearance of the EUT



Figure 4
Internal of the EUT



Figure 5
Battery of the EUT



Figure 6
Components Side of the PCB

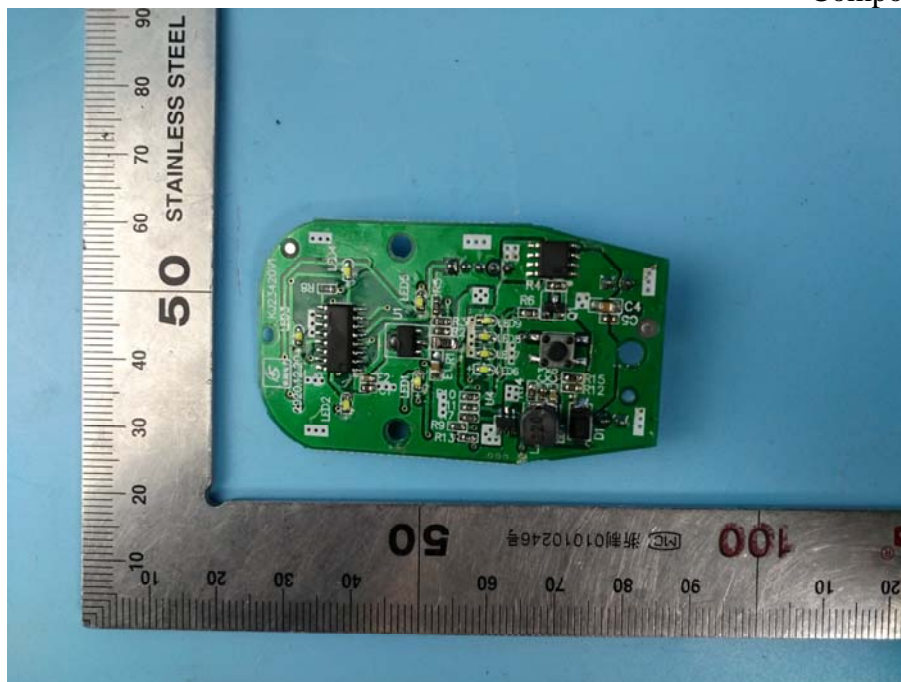


Figure 7
Components Side of the PCB

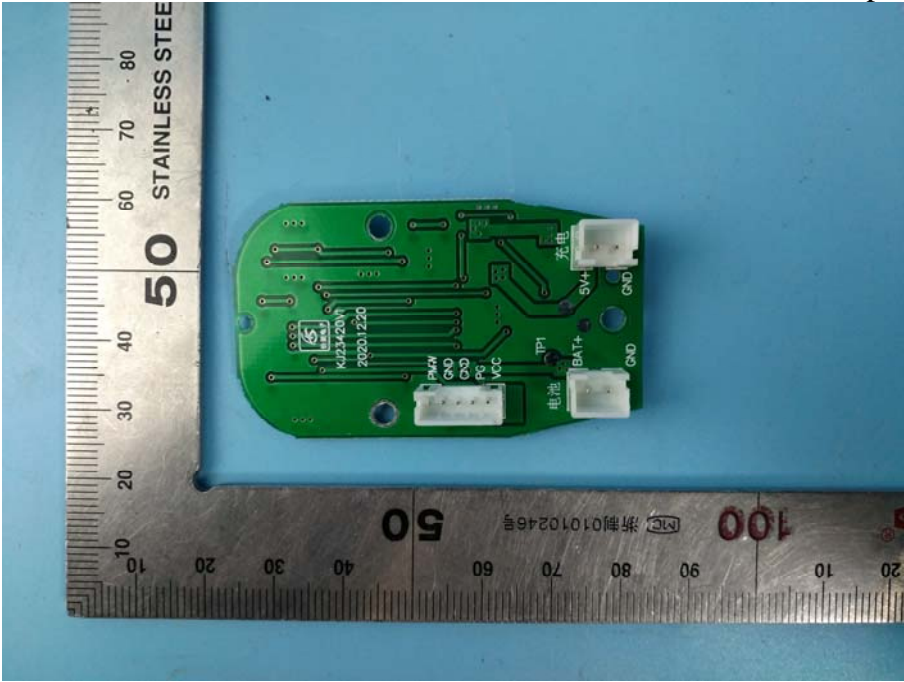


Figure 8
General Appearance of the EUT



Figure 9
General Appearance of the EUT

