# 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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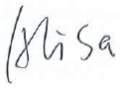
# TEST REPORT VERIFICATION

| | | |
|---|---|---|
| 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.<br>zip code:325400 | |
| Product | Product Name | FITRX PRO MASSAGE GUN |
| | Model No. | 8034 |
| | Power Supply | DC 11.1V by Battery<br>Input:110-240V ~, 0.4A ,50/60Hz<br>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. | |

*Note

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.

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.

| | |
|---|---|
| Prepared by |  |
| | Alisa Luo(Engineer) |
| 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<br><br>Accredited by Industry Canada Registration Number: 7103A-1 Oct. 22, 2012<br><br>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 |

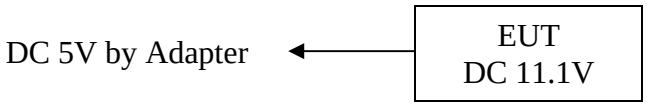
# 3. SUMMARY OF TEST RESULTS

| 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 MASSAGE GUN )

# 5. TEST INSTRUMENT USED

## 5.1.For Conducted Disturbance at Mains Terminals Emission Test

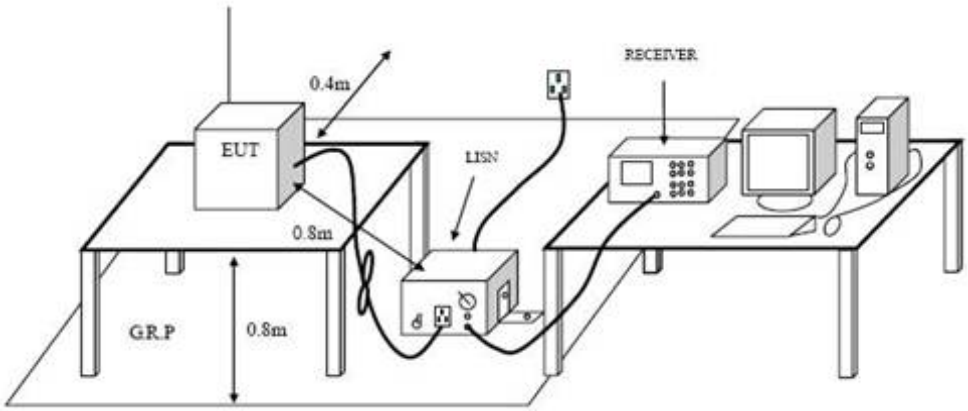
| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|---|---|---|---|---|---|---|
| 1. | Test Receiver | Rohde & Schwarz | ESCI | 100492 | Mar. 06, 20 | 1 Year |
| 2. | L.I.S.N. | Rohde & Schwarz | ENV216 | 100093 | Mar. 06, 20 | 1 Year |
| 3. | Coaxial Switch | Anritsu 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(μV) | Average Level dB(μV) |
| 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

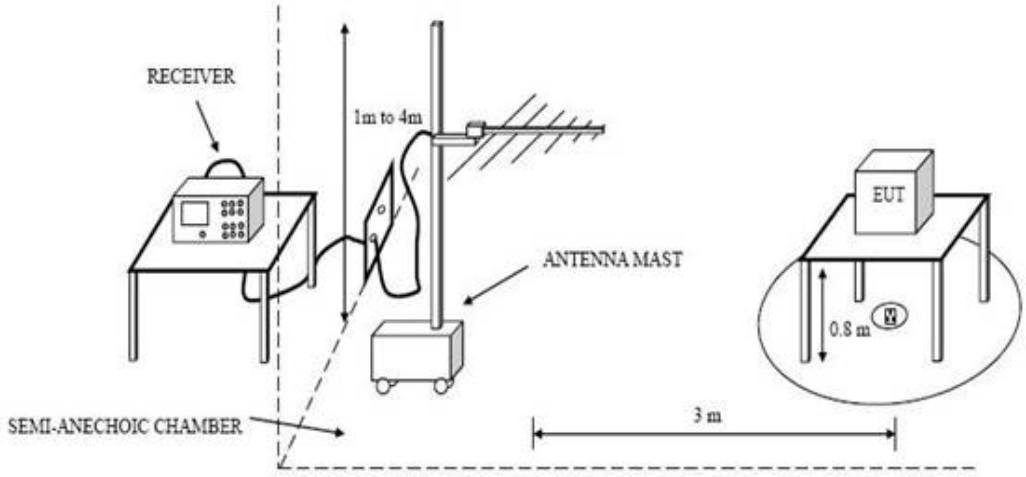
If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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 (dBμV/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)μV = 20 log Emission level μV/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

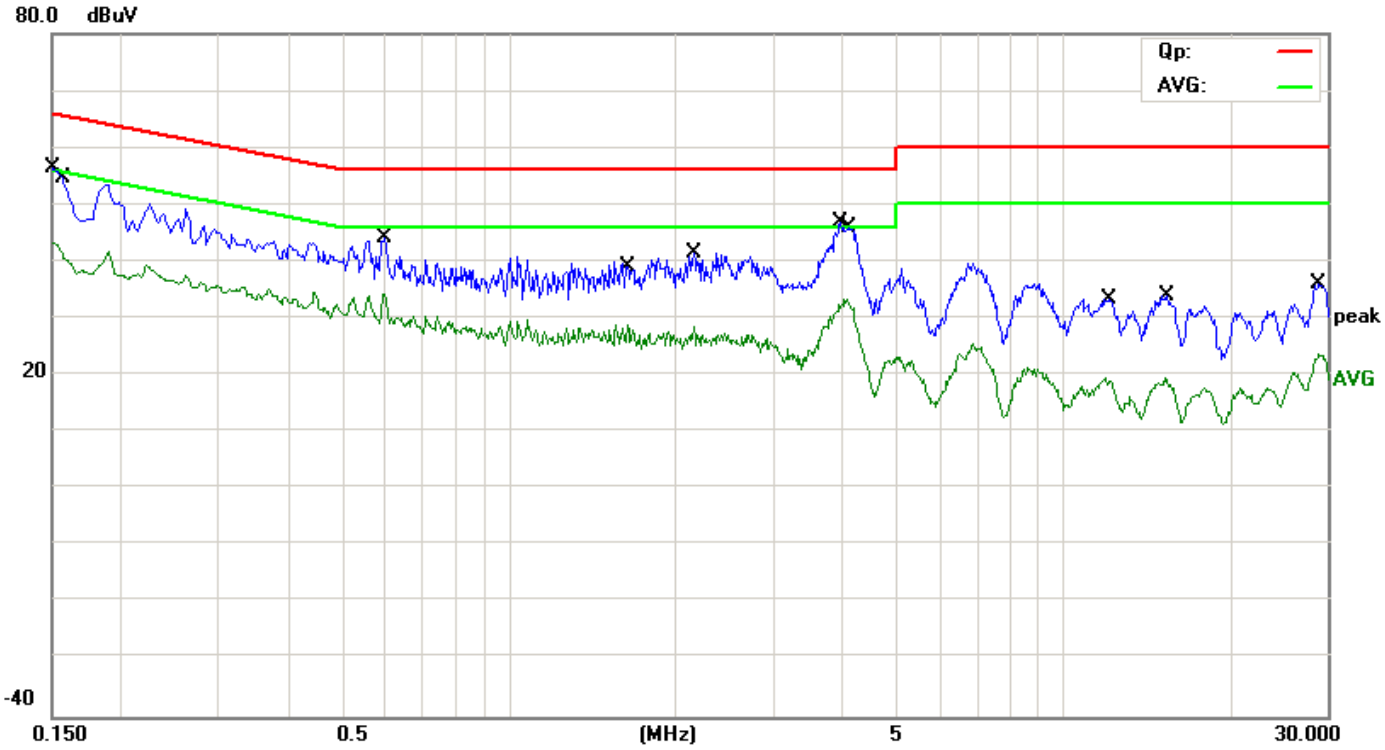
Emission Level= Correct Factor + Reading Level.

All reading are Quasi-Peak values.

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

# APPENDIX I

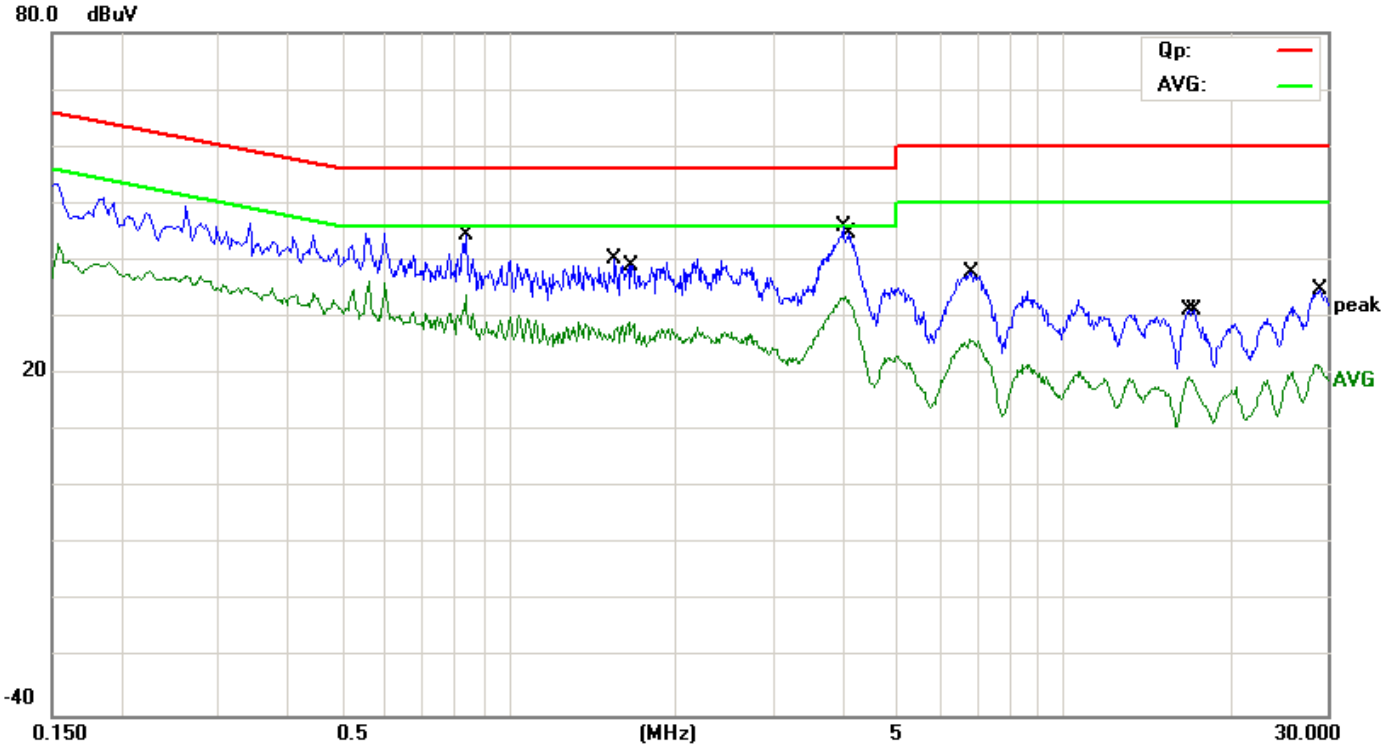
| | | | |
|---|---|---|---|
| **EUT:** | **FITRX PRO MASSAGE GUN** | **M/N:** | **8034** |
| **Mode:** | **Charging** | **Phase:** | **L** |
| **Test by:** | **leo** | **Power:** | **DC 5V by Adapter** |
| **Temperature: / Humidity** | **19.0℃/ 53.0%** | **Test date:** | **2021-01-15** |




| 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 MASSAGE GUN | M/N: | 8034 |
|---|---|---|---|
| Mode: | Charging | Phase: | N |
| Test by: | leo | Power: | DC 5V by Adapter |
| Temperature: / Humidity | 19.0℃/ 53.0% | Test date: | 2021-01-15 |

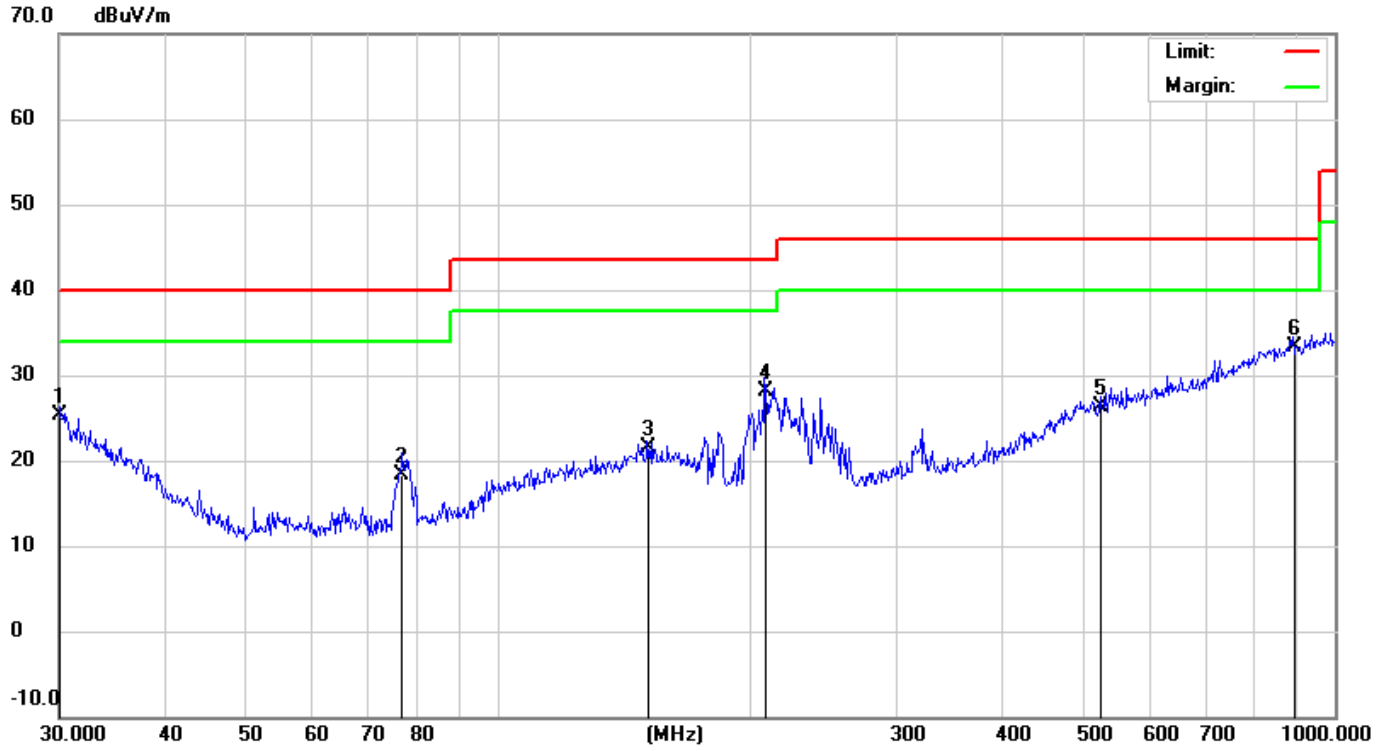



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.8380 | 34.84 | 9.60 | 44.44 | 56.00 | -11.56 | QP | |
| 2 | | 0.8380 | 24.29 | 9.60 | 33.89 | 46.00 | -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

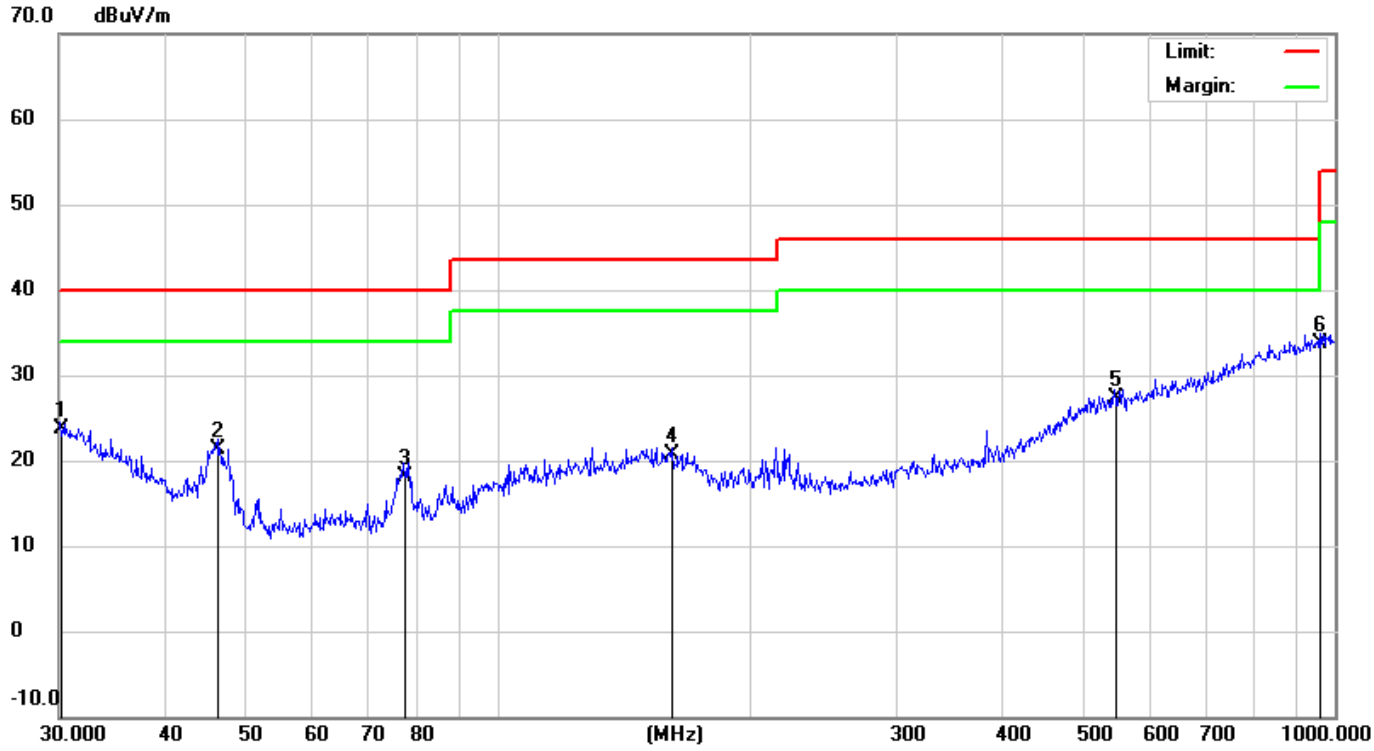
| EUT: | FITRX PRO MASSAGE GUN | M/N: | 8034 |
|---|---|---|---|
| Mode: | Running | Polarization: | Horizontal |
| Test by: | Peter | Power: | DC 11.1V by Battery |
| Temperature: / Humidity | 24.0℃/53.0% | Test date: | 2021-01-15 |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | 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

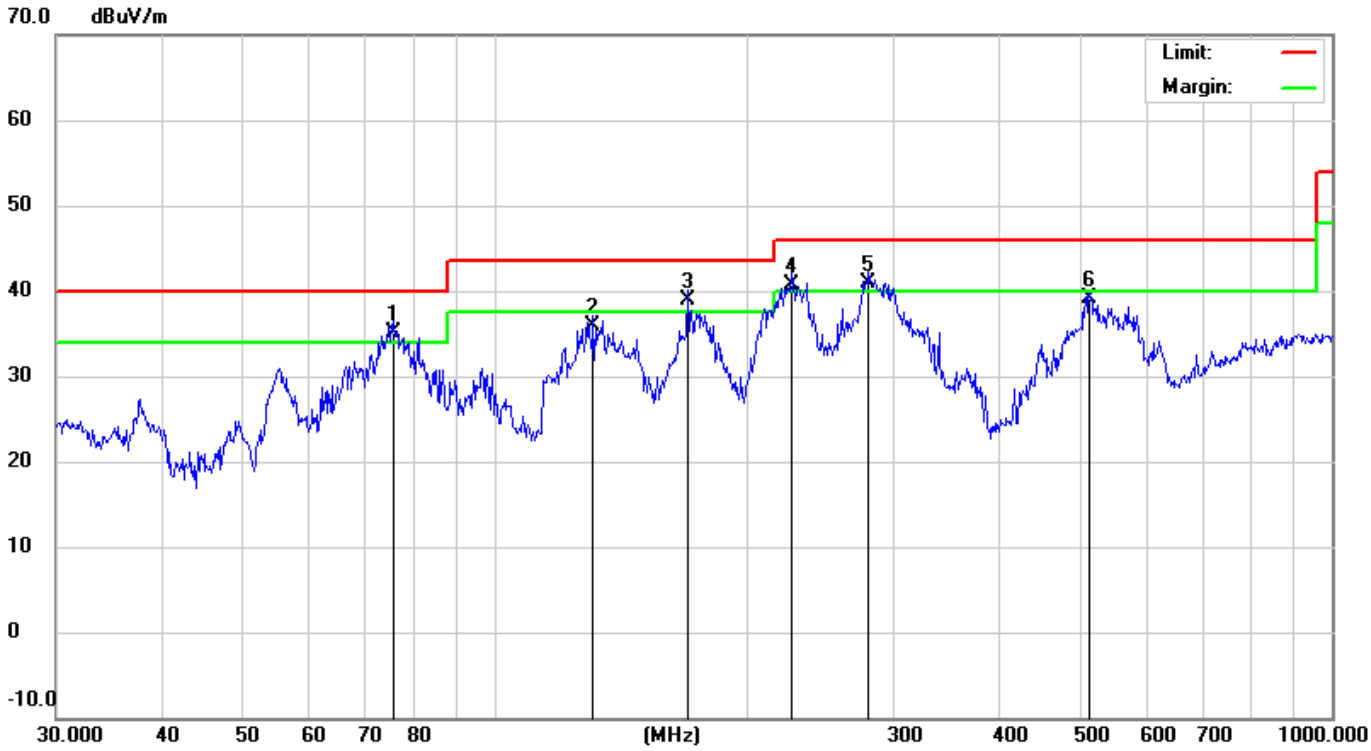
| EUT: | FITRX PRO MASSAGE GUN | M/N: | 8034 |
|---|---|---|---|
| Mode: | Running | Polarization: | Vertical |
| Test by: | Peter | Power: | DC 11.1V by Battery |
| Temperature: / Humidity | 24.0℃/53.0% | Test date: | 2021-01-15 |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | 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

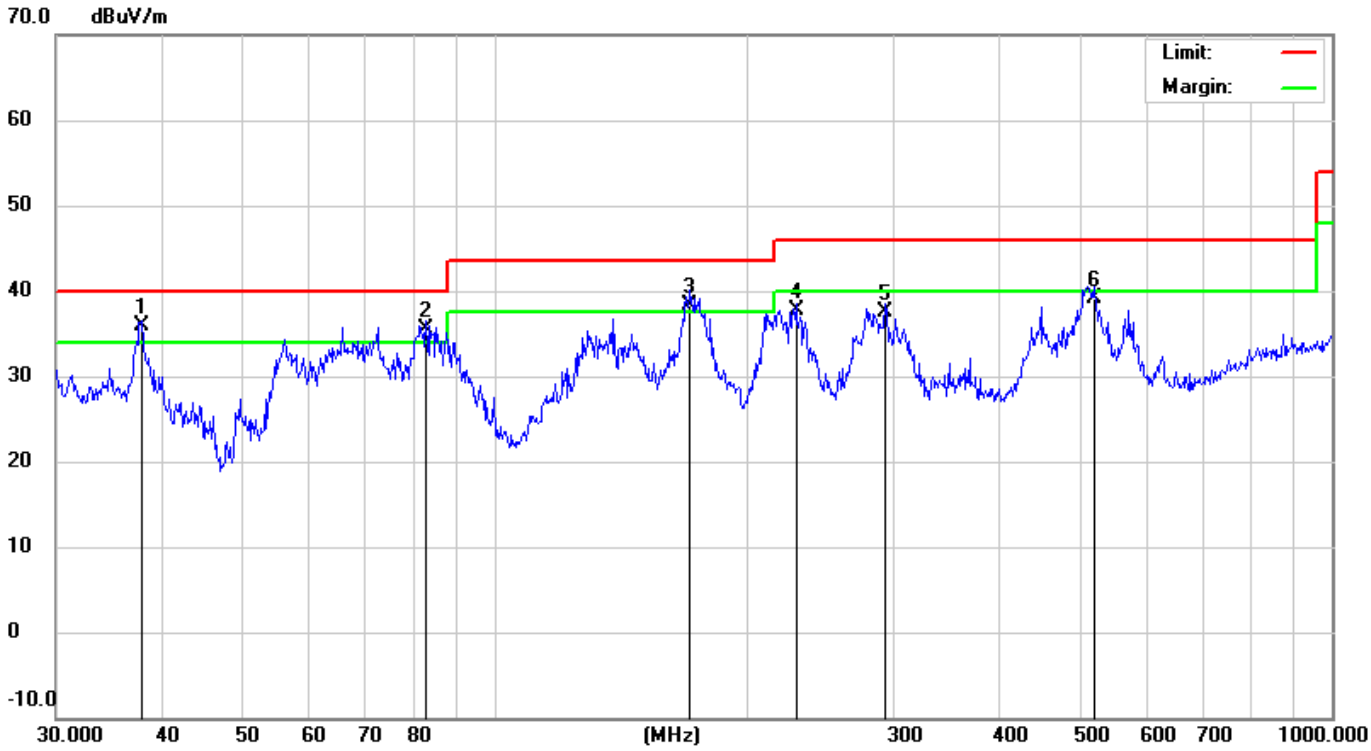
| | | | |
|---|---|---|---|
| **EUT:** | **FITRX PRO MASSAGE GUN** | **M/N:** | **8034** |
| **Mode:** | **Charging** | **Polarization:** | **Horizontal** |
| **Test by:** | **Peter** | **Power:** | **DC 5V by Adapter** |
| **Temperature: / Humidity** | **24.0℃/53.0%** | **Test date:** | **2021-01-15**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




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 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 MASSAGE GUN | M/N: | 8034 |
|---|---|---|---|
| Mode: | Charging | Polarization: | Vertical |
| Test by: | Peter | Power: | DC 5V by Adapter |
| Temperature: / Humidity | 24.0℃/53.0% | Test date: | 2021-01-15 |

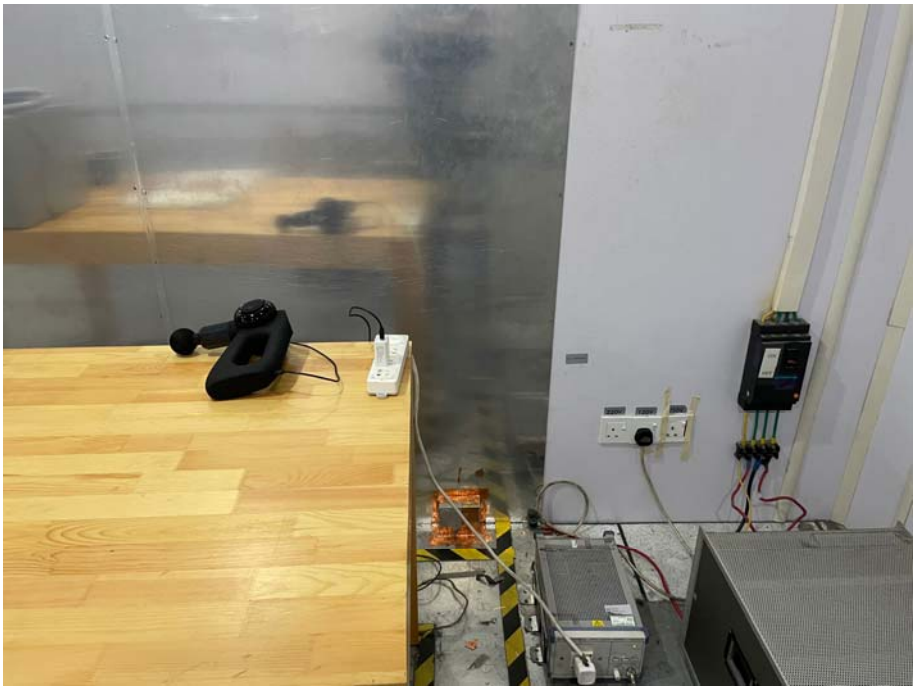



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | * | 37.9449 | 20.59 | 15.32 | 35.91 | 40.00 | -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 | | | |

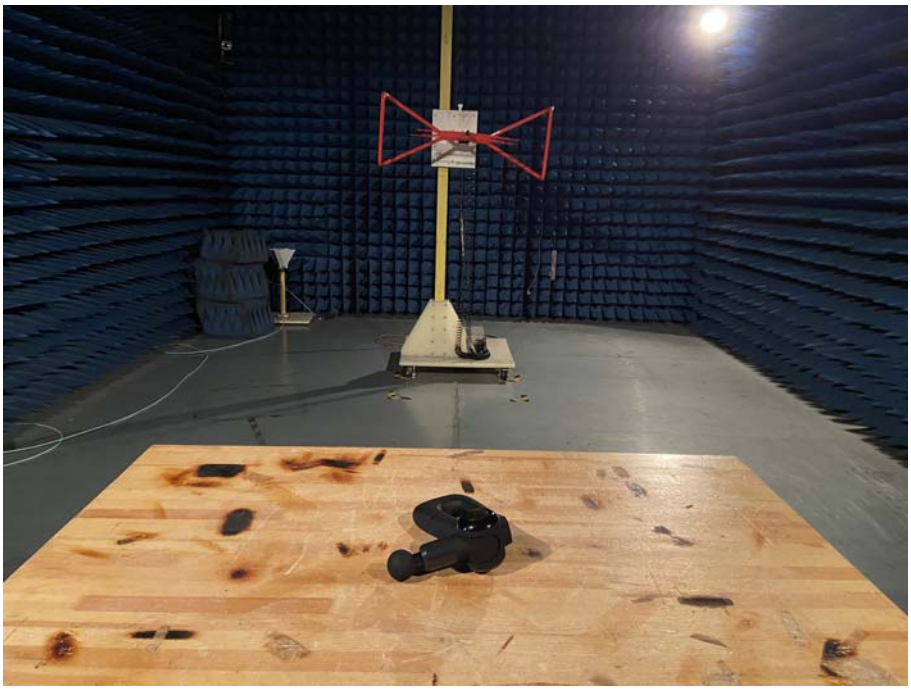
*:Maximum data x:Over limit !:over margin

# 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

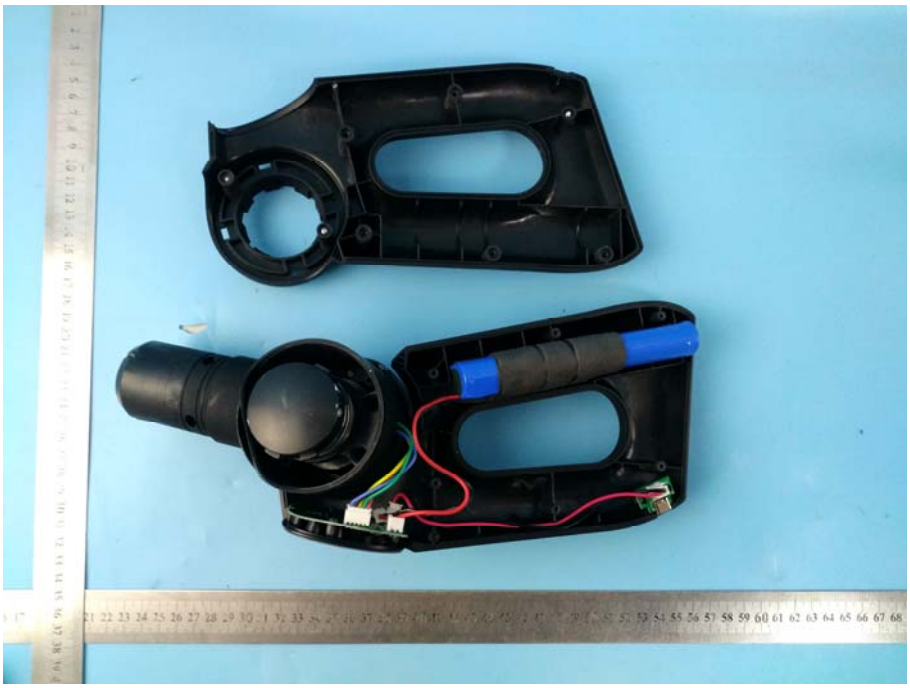


**Figure 5**
Battery of the EUT


**Figure 6**
Components Side of the PCB

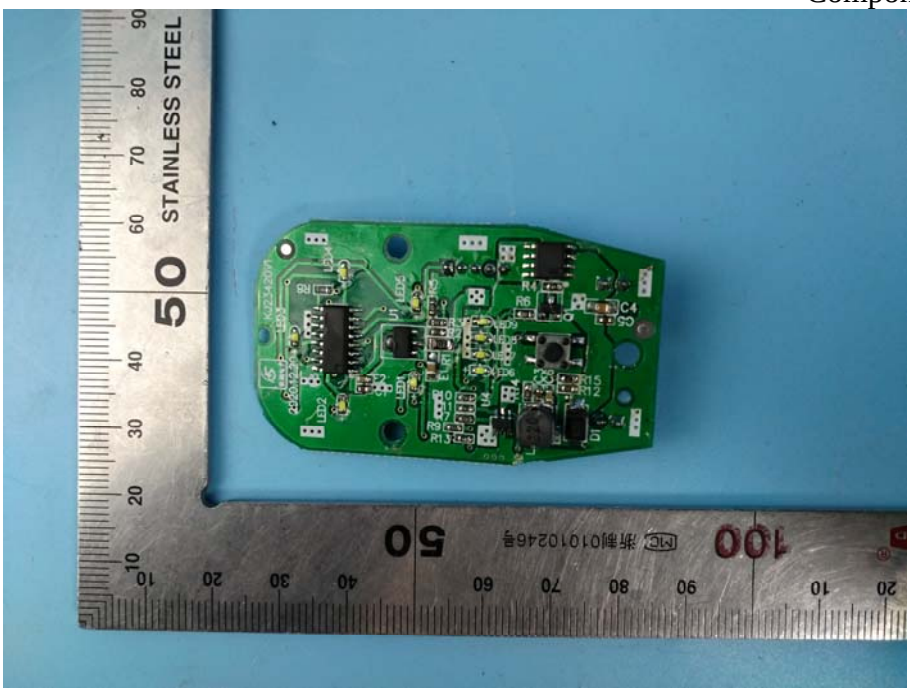


**Figure 7**
Components Side of the PCB

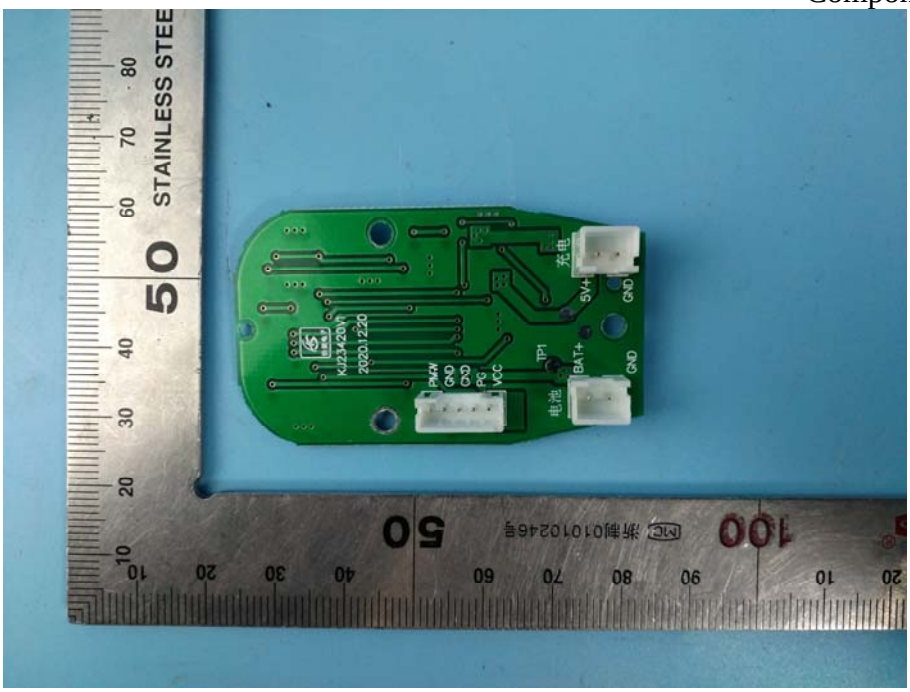



**Figure 8**
General Appearance of the EUT

**Figure 9**
General Appearance of the EUT