

Report No.: TW2412070E

Applicant: Eastern Times Technology Co., Ltd

Product: 2.4G WIRELESS MECHANICAL KEYBOARD

Model No.: BK-8772, BS-8772, ET-8652, ET-8653, ET-8768, ET-8772

Trademark: REDRAGON

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

Terry Tang

Manager

Dated: December 19, 2024

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:

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

CAB identifier: CN0033

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Test Report Conclusion

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The report refers only to the sample tested and does not apply to the bulk.

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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: Eastern Times Technology Co., Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town, Dongguan City,

Guangdong, China.

1.3 Description of EUT

Product: 2.4G WIRELESS MECHANICAL KEYBOARD

Manufacturer: Eastern Times Technology Co., Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town,

Dongguan City, Guangdong, China.

Trademark: REDRAGON

Model Number: BK-8772

Additional Model Name BS-8772, ET-8652, ET-8653, ET-8768, ET-8772

Rating: DC5V, 500mA

Battery DC3.7V, 1600mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2408-2474MHz

Channel Number: 34

Channel Separation: 2MHz

Hardware Version: 8652-D1 V1

Software Version: 524F

Serial No.: BK-8772241100002

Antenna Designation PCB antenna with gain 0.11dBi Max (Get from the antenna specification)

1.4 Submitted Sample: 2 Samples

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1.5 Test Duration

2024-12-06 to 2024-12-19

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

The sample tested by

Print Name: Andy Xing

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| 2.0 Test Equipment | | | | | |
|--------------------|--------------|------------------|--------------|--------------|------------|
| Instrument Type | Manufacturer | Model | Serial No. | Date of Cal. | Due Date |
| ESPI Test Receiver | R&S | ESPI 3 | 100379 | 2024-07-12 | 2025-07-11 |
| LISN | R&S | EZH3-Z5 | 100294 | 2024-07-12 | 2025-07-11 |
| LISN | R&S | EZH3-Z5 | 100253 | 2024-07-12 | 2025-07-11 |
| Impuls-Begrenzer | R&S | ESH3-Z2 | 100281 | 2024-07-12 | 2025-07-11 |
| Loop Antenna | EMCO | 6507 | 00078608 | 2022-07-18 | 2025-07-17 |
| Spectrum | R&S | FSIQ26 | 100292 | 2024-07-12 | 2025-07-11 |
| Horn Antenna | A-INFO | LB-180400-KF | J211060660 | 2022-07-18 | 2025-07-17 |
| Horn Antenna | R&S | BBHA 9120D | 9120D-631 | 2022-07-18 | 2025-07-17 |
| Power meter | Anritsu | ML2487A | 6K00003613 | 2024-07-12 | 2025-07-11 |
| Power sensor | Anritsu | MA2491A | 32263 | 2024-07-12 | 2025-07-11 |
| Bilog Antenna | Schwarebeck | VULB9163 | 9163/340 | 2022-07-18 | 2025-07-17 |
| 9*6*6 Anechoic | | | N/A | 2022-07-26 | 2025-07-25 |
| EMI Test Receiver | RS | ESVB | 826156/011 | 2024-07-12 | 2025-07-11 |
| EMI Test Receiver | RS | ESCS 30 | 834115/006 | 2024-07-12 | 2025-07-11 |
| Spectrum | HP/Agilent | E4407B | MY50441392 | 2024-07-12 | 2025-07-11 |
| Spectrum | RS | FSP | 1164.4391.38 | 2024-07-12 | 2025-07-11 |
| RF Cable | Zhengdi | ZT26-NJ-NJ-8M/FA | 1 | 2024-07-12 | 2025-07-11 |
| RF Cable | Zhengdi | 7m | | 2024-07-12 | 2025-07-11 |
| Pre-Amplifier | Schwarebeck | BBV9743 | #218 | 2024-07-12 | 2025-07-11 |
| Pre-Amplifier | HP/Agilent | 8449B | 3008A00160 | 2024-07-12 | 2025-07-11 |
| LISN | SCHAFFNER | NNB42 | 00012 | 2024-07-12 | 2025-07-11 |
| ESPI Test Receiver | R&S | ESPI 3 | 100379 | 2024-07-12 | 2025-07-11 |
| LISN | R&S | EZH3-Z5 | 100294 | 2024-07-12 | 2025-07-11 |

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 15.203 | Antenna Requirement | Pass | Complies |
| 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

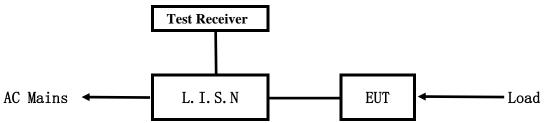
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5. Power Line Conducted Emission Test

5.1 Schematics of the test

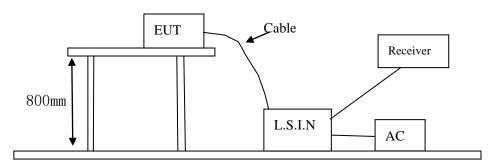


EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2014. The Frequency spectrum from 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2014.

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



5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.4-2014. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

34 channels are provided to the EUT

A. EUT

| Device | Manufacturer | Model | FCC ID |
|---------------|--------------------------|-------------------|-------------|
| 2.4G WIRELESS | Eastern Times Technology | BK-8772, BS-8772, | |
| MECHANICAL | Eastern Times Technology | ET-8652, ET-8653, | TUVET-8652D |
| KEYBOARD | Co., Ltd | ET-8768, ET-8772 | |

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B. Internal Device

| Device | Manufacturer | Model | FCC ID/DOC |
|--------|--------------|-------|------------|
| N/A | | | |

C. Peripherals

| Device | Manufacturer | Model | Rating |
|--------------|--------------|-----------------|-----------------------------------|
| Power Supply | KEYU | KA23-0502000DEU | Input: 100-240V~, 50/60Hz, 0.35A; |
| | | | Output: DC5V, 2A |

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2014

- 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 (dB 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

Date: 2024-12-19



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

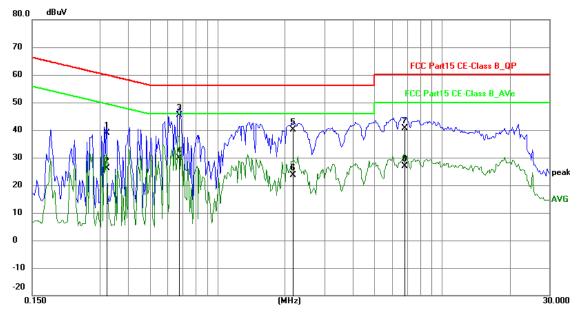
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

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 | 0.3215 | 28.63 | 10.35 | 38.98 | 59.67 | -20.69 | QP | Р |
| 2 | 0.3215 | 15.80 | 10.35 | 26.15 | 49.67 | -23.52 | AVG | Р |
| 3 | 0.6765 | 34.89 | 10.45 | 45.34 | 56.00 | -10.66 | QP | Р |
| 4 | 0.6765 | 19.36 | 10.45 | 29.81 | 46.00 | -16.19 | AVG | Р |
| 5 | 2.1702 | 28.67 | 11.38 | 40.05 | 56.00 | -15.95 | QP | Р |
| 6 | 2.1702 | 12.35 | 11.38 | 23.73 | 46.00 | -22.27 | AVG | Р |
| 7 | 6.8220 | 27.81 | 12.79 | 40.60 | 60.00 | -19.40 | QP | Р |
| 8 | 6.8220 | 14.05 | 12.79 | 26.84 | 50.00 | -23.16 | AVG | Р |

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

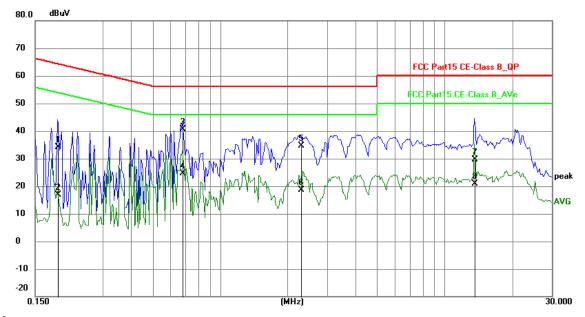
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

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 | 0.1890 | 23.83 | 10.32 | 34.15 | 64.08 | -29.93 | QP | Р |
| 2 | 0.1890 | 6.49 | 10.32 | 16.81 | 54.08 | -37.27 | AVG | Р |
| 3 | 0.6804 | 30.26 | 10.45 | 40.71 | 56.00 | -15.29 | QP | Р |
| 4 | 0.6804 | 14.22 | 10.45 | 24.67 | 46.00 | -21.33 | AVG | Р |
| 5 | 2.2950 | 23.27 | 11.42 | 34.69 | 56.00 | -21.31 | QP | J |
| 6 | 2.2950 | 7.32 | 11.42 | 18.74 | 46.00 | -27.26 | AVG | Р |
| 7 | 13.5573 | 14.88 | 14.75 | 29.63 | 60.00 | -30.37 | QP | А |
| 8 | 13.5573 | 6.16 | 14.75 | 20.91 | 50.00 | -29.09 | AVG | Р |

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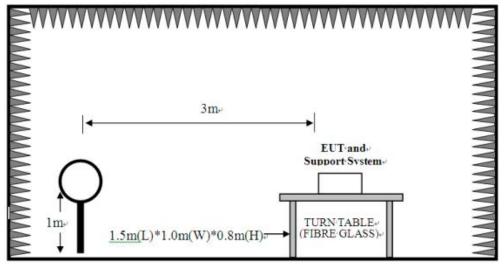


6 Radiated Emission Test

- 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=5MHz, 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

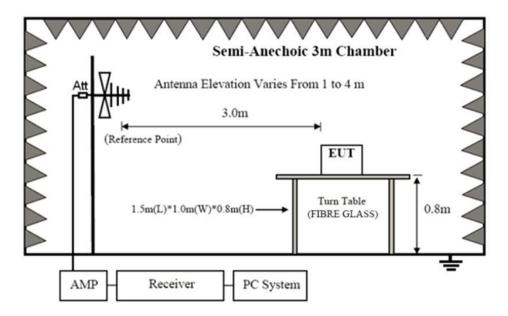


For radiated emissions from 30MHz to1GHz

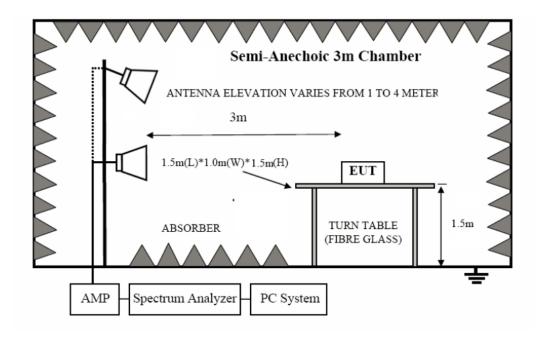
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For radiated emissions above 1GHz



- 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 St | | Field Strength of Fundamental (3m) | | | trength of Harmo | nics (3m) |
|--------------------------------|------|------------------------------------|------------|------|------------------|-----------|
| (MHz) | mV/m | dBuV/m | | uV/m | dBu | V/m |
| 2400-2483.5 | 50 | 94 (Average) | 114 (Peak) | 500 | 54 (Average) | 74 (Peak) |

Note:

- 1. RF Field Strength $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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 μ V/m) | | |
|-----------------------|--------------|-----------------------------------|--|--|
| 0.009-0.490 | 3 | 20log(2400/F(kHz)) +40log (300/3) | | |
| 0.490-1.705 | 3 | 20log(24000/F(kHz)) +40log (30/3) | | |
| 1.705-30 | 3 | 69.5 | | |
| 30-80 | 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. For radiated emissions from 9kHz to 30MHz, the emission level is much less than the limit for more than 20dB. No necessary to take down the record.
- 6. Battery full charged during tests.

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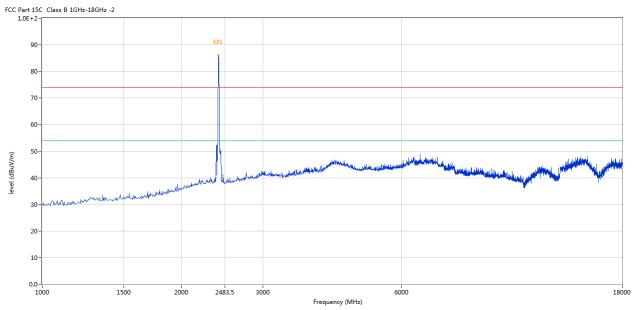


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2408MHz

Horizontal



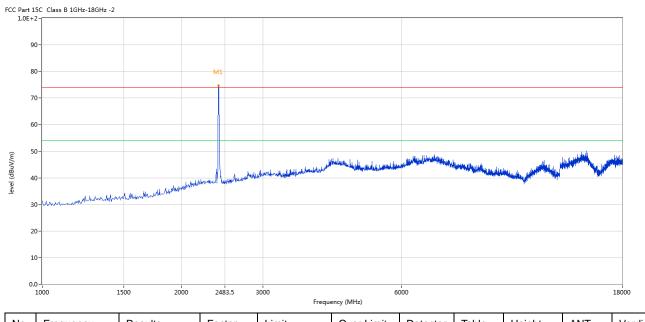
| No. | Frequency | Results | Factor | Limit | Over Limit | Detector | Table | Height | ANT | Verdict |
|-----|-----------|----------|--------|----------|------------|----------|-------|--------|------------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (o) | (cm) | | |
| 1 | 2408 | 86.00 | -3.57 | 114.0 | -28.00 | Peak | 87.00 | 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 | 2408 | 74.72 | -3.57 | 114.0 | -39.28 | Peak | 72.00 | 100 | Vertical | Pass |

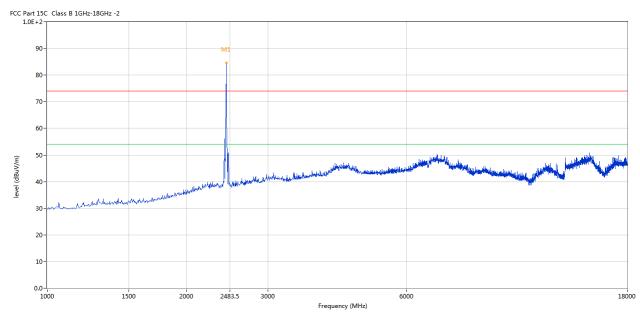
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Please refer to the following test plots for details: Middle Channel-2440MHz

Horizontal



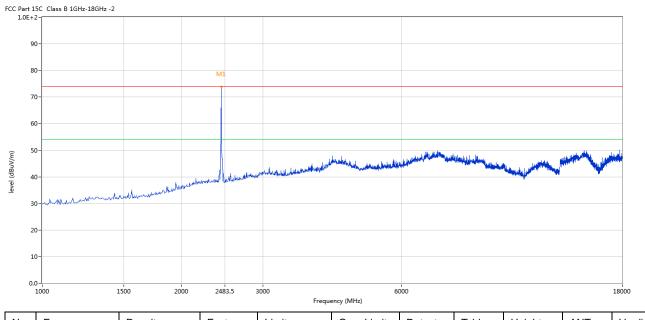
| No. | Frequency | Results | Factor | Limit | Over Limit | Detector | Table | Height | ANT | Verdict |
|-----|-----------|----------|--------|----------|------------|----------|--------|--------|------------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (o) | (cm) | | |
| 1 | 2440 | 84.56 | -3.57 | 114.0 | -29.44 | Peak | 115.00 | 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 | 73.85 | -3.57 | 114.0 | -40.15 | Peak | 83.00 | 100 | Vertical | Pass |

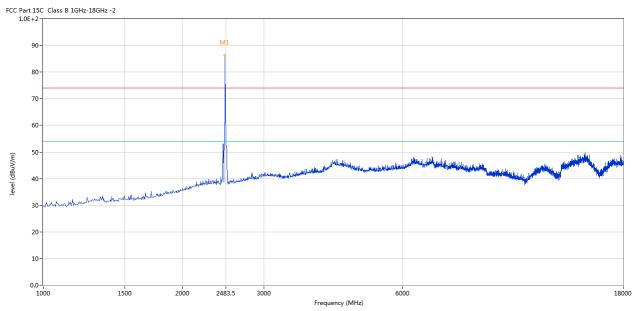
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Please refer to the following test plots for details: High Channel-2474MHz

Horizontal



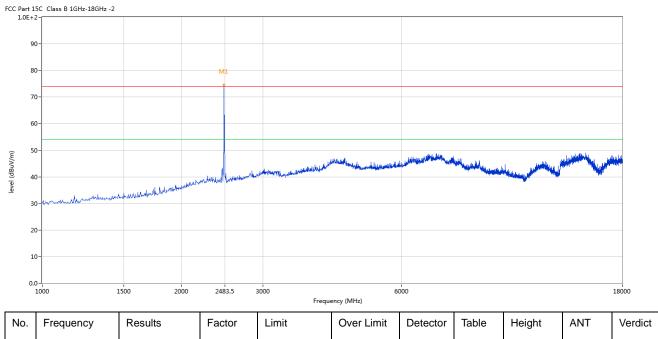
| No. | Frequency | Results | Factor | Limit | Over Limit | Detector | Table | Height | ANT | Verdict |
|-----|-----------|----------|--------|----------|------------|----------|--------|--------|------------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (o) | (cm) | | |
| 1 | 2474 | 86.16 | -3.57 | 114.0 | -27.84 | Peak | 132.00 | 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 | 2474 | 74.52 | -3.57 | 114.0 | -39.48 | Peak | 41.00 | 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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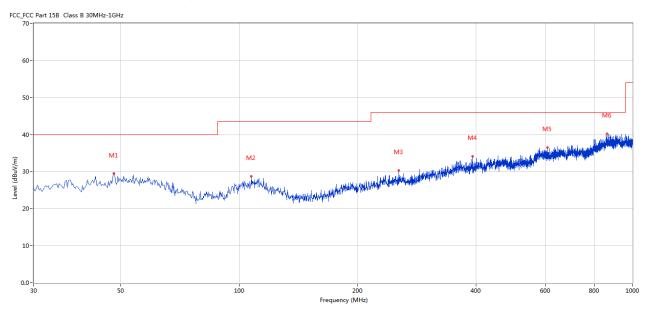


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



| No. | Frequency | Results | Factor | Limit | Margin | Detector | Table | Height | Antenna | Verdict |
|-----|-----------|----------|--------|----------|--------|----------|----------|--------|------------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (Degree) | (cm) | | |
| 1 | 47.941 | 29.47 | -5.39 | 40.0 | 10.53 | Peak | 208.00 | 100 | Horizontal | Pass |
| 2 | 107.338 | 28.70 | -6.07 | 43.5 | 14.80 | Peak | 99.00 | 100 | Horizontal | Pass |
| 3 | 254.741 | 30.30 | -5.39 | 46.0 | 15.70 | Peak | 151.00 | 100 | Horizontal | Pass |
| 4 | 392.447 | 34.18 | -1.78 | 46.0 | 11.82 | Peak | 68.00 | 100 | Horizontal | Pass |
| 5 | 608.460 | 36.54 | 1.44 | 46.0 | 9.46 | Peak | 39.00 | 100 | Horizontal | Pass |
| 6 | 861.082 | 40.19 | 4.89 | 46.0 | 5.81 | Peak | 201.00 | 100 | Horizontal | Pass |

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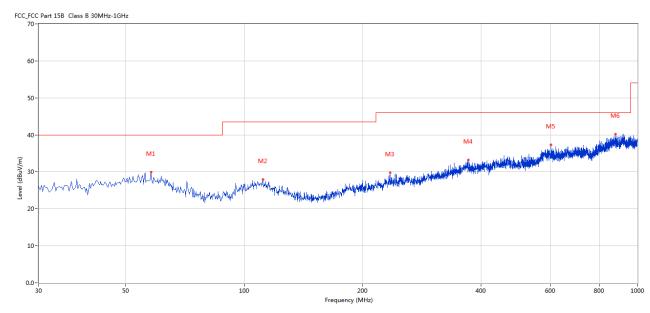


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



| No. | Frequency | Results | Factor | Limit | Margin | Detector | Table | Height | Antenna | Verdict |
|-----|-----------|----------|--------|----------|--------|----------|----------|--------|----------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (Degree) | (cm) | | |
| 1 | 57.881 | 29.91 | -4.90 | 40.0 | 10.09 | Peak | 205.00 | 100 | Vertical | Pass |
| 2 | 111.460 | 27.97 | -6.04 | 43.5 | 15.53 | Peak | 0.00 | 100 | Vertical | Pass |
| 3 | 234.619 | 29.77 | -5.32 | 46.0 | 16.23 | Peak | 223.00 | 100 | Vertical | Pass |
| 4 | 371.112 | 33.18 | -1.77 | 46.0 | 12.82 | Peak | 187.00 | 100 | Vertical | Pass |
| 5 | 602.399 | 37.31 | 1.45 | 46.0 | 8.69 | Peak | 329.00 | 100 | Vertical | Pass |
| 6 | 878.053 | 40.25 | 5.11 | 46.0 | 5.75 | Peak | 137.00 | 100 | Vertical | Pass |

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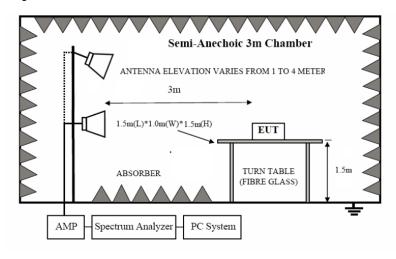


7. Band Edge

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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4**

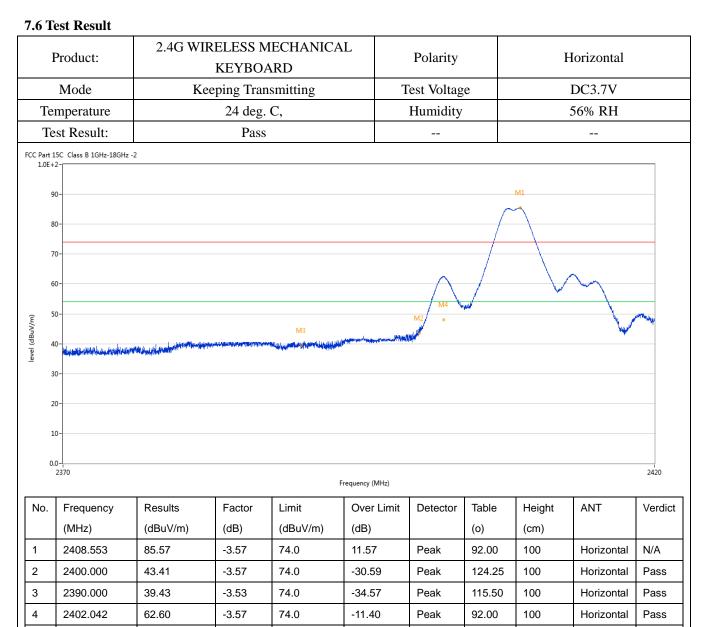
2402.042

48.32

-3.57

54.0





-5.68

ΑV

92.00

100

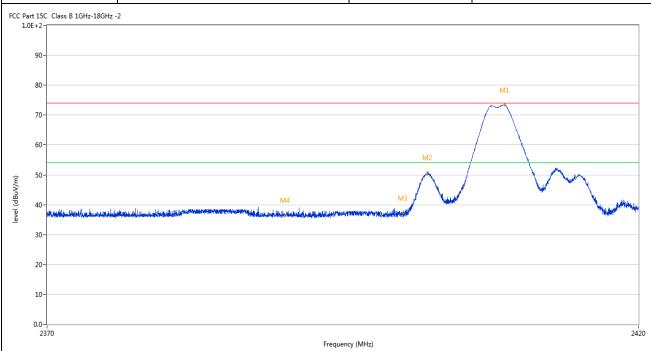
Pass

Horizontal

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| Product: | 2.4G WIRELESS MECHANICAL KEYBOARD | Detector | Vertical |
|--------------|--------------------------------------|--------------|----------|
| Mode | Keeping Transmitting | Test Voltage | DC3.7V |
| Temperature | 24 deg. C, | Humidity | 56% RH |
| Test Result: | Pass | | |

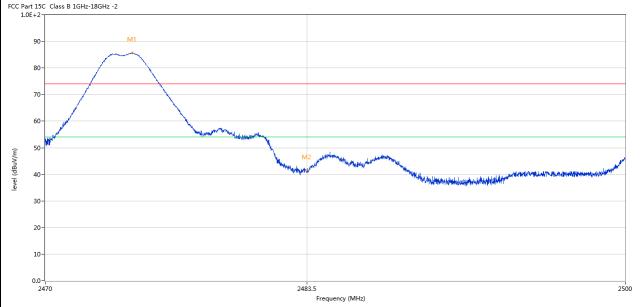


| No. | Frequency | Results | Factor | Limit | Over Limit | Detector | Table | Height | ANT | Verdict |
|-----|-----------|----------|--------|----------|------------|----------|--------|--------|----------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | (dB) | | (o) | (cm) | | |
| 1 | 2408.603 | 73.41 | -3.57 | 74.0 | -0.59 | Peak | 71.00 | 100 | Vertical | Pass |
| 2 | 2402.042 | 50.83 | -3.57 | 74.0 | -23.17 | Peak | 56.00 | 100 | Vertical | Pass |
| 3 | 2400.000 | 37.27 | -3.57 | 74.0 | -36.73 | Peak | 120.58 | 100 | Vertical | Pass |
| 4 | 2390.000 | 36.52 | -3.53 | 74.0 | -37.48 | Peak | 125.50 | 100 | Vertical | Pass |

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| Product: | 2.4G WIRELESS MECHANICAL KEYBOARD | Polarity | Horizontal | | | | |
|-------------------------------------|--------------------------------------|--------------|------------|--|--|--|--|
| Mode | Keeping Transmitting | Test Voltage | DC3.7V | | | | |
| Temperature | 24 deg. C, | Humidity | 56% RH | | | | |
| Test Result: | Pass | | | | | | |
| FCC Part 15C Class B 1GHz-18GHz - 2 | | | | | | | |



| No. | Frequency | Results | Factor | Limit | Over | Detector | Table | Height | ANT | Verdict |
|-----|-----------|----------|--------|----------|------------|----------|--------|--------|------------|---------|
| | (MHz) | (dBuV/m) | (dB) | (dBuV/m) | Limit (dB) | | (o) | (cm) | | |
| 1 | 2474.486 | 85.62 | -3.57 | 74.0 | 11.62 | Peak | 137.00 | 100 | Horizontal | N/A |
| 2 | 2483.500 | 41.53 | -3.57 | 74.0 | -32.47 | Peak | 127.00 | 100 | Horizontal | Pass |

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| | Product: | 2.4G WIF | , D | etector | | Vertical | | | | |
|------------------|---|------------------|--|-----------------------|---------------------------------|---|--------------------------------|--|--------------------------------|-------------------|
| | Mode | Ke | Tes | Test Voltage Humidity | | DC3.7V | | | | |
| To | emperature | 24 deg. C, Pass | | | | Н | 56% RH | | | |
| | est Result: | | | | | | | | | |
| 1.0E | 15C Class B 1GHz-18GHz -2 +2- 90- 80- | M1 | | | | | | | | |
| (m/ngg) janai | 60- 50- 40- 30- 20- | | removed to produce the second supplies and the | M2 | th he wastly was seen to have a | ^d ad _a mahibunakan libbin | ubbywith lifturjitenwaki | ariin heig of he had a see heigh a see | erushayekkaya sayakbara kilane | all and the later |
| level (dbuV/m) | 50- 40- 30- 20- 10- 0.0- 2470 | | | 2483.5 Freque | ency (MHz) | | niklywist (Litzhun) transanded | | | 2500 |
| (m/ngp) ievei | 50- 40- 30- 20- 10- 0.0- 2470 | Results (dBuV/m) | Factor (dB) | 2483.5 Freque | | Detector | Table | Height (cm) | ANT | 2500 |
| (III/Angn) lakai | 50- 40- 30- 20- 10- 0.0- 2470 | | Factor | Limit (dBuV/m) (| ency (MHz) Over Limit | | | Height | | |

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

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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. The antenna gain is 0.11dBi Max. It fulfills the requirement of this section. Test Result: Pass

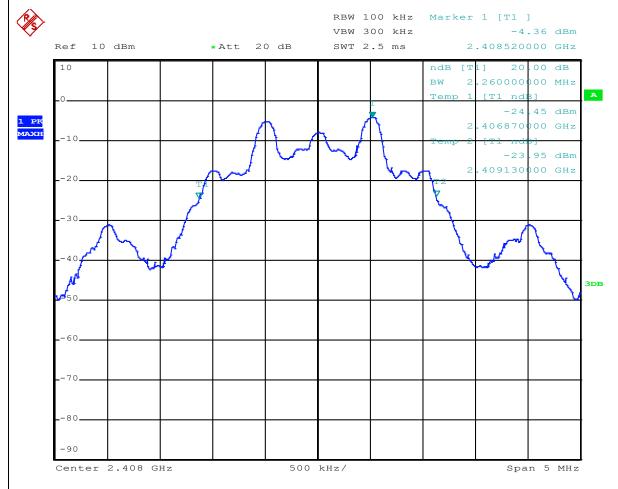
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| 9.0 20dB Bandwidth Measurement | | | | | | | |
|--------------------------------|--------------------------------------|------------|-------------------|--|--|--|--|
| Product: | 2.4G WIRELESS MECHANICAL KEYBOARD | Test Mode: | Keep transmitting | | | | |
| Mode | ode Keeping Transmitting | | DC3.7V | | | | |
| Temperature | 24 deg. C, | Humidity | 56% RH | | | | |
| Test Result: | Pass | Detector | PK | | | | |
| 20dB Bandwidth | Bandwidth 2.260MHz | | - | | | | |



Date: 17.DEC.2024 14:36:48

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Span 5 MHz

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| P | Product: Mode Temperature Test Result: | | 2.4G WIRELESS MECHANICAL KEYBOARD Keeping Transmitting 24 deg. C, Pass | | | | Test Mode: | | Keep transmitting | | nsmitting | |
|--------------|---|-----|--|--------|--------------------------|------------------------|------------|------------------------|---------------------------------------|--------------------|-----------|--|
| | | | | | | | Test ' | Test Voltage | | DC3.7V | | |
| Ten | | | | | | | Humidity | | 56% RH | | RH | |
| Tes | | | | | | | Det | Detector | | PK | | |
| 20dB | Bandwidt | h | 2.260MHz | | | | | | | | | |
| % s> | Ref 10 | dBm | | •Att 2 | 0 dB | *RBW 10 *VBW 30 SWT 2. | | | .440520 | .94 dBm | • | |
| | _0 | | | | | | | | .2600000 [T1 nd] | 000 MHz | A | |
| 1 PK MAXH | 10 | | | f | 1 | | | 2 Temp 2 | -24 .4388800 [T1 nd] | .76 dBm 000 GHz | | |
| | 20 | | T. | | \mathcal{L}_\darksquares | ~ | | | -25 .441140 | .06 dBm | | |
| | 30 | | F | | | | | P P | | | | |
| | -40 | کر | | | | | | | كمسر | J. W. | | |
| | ₩ 50 | ₹\. | N. | | | | | • | المحورة | J. V. | 3DB | |
| | 60 | | | | | | | | | | | |
| | | | | | | | | | | | | |

Date: 17.DEC.2024 15:00:06

Center 2.44 GHz

500 kHz/

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Span 5 MHz

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Date: 2024-12-19



| Product: | 2.4G WIRELESS MECHANICAL KEYBOARD Keeping Transmitting | | | | Test Mode: Test Voltage | | Keep transmitting DC3.7V | | |
|----------------|--|------------|------------------------------|----------|--------------------------|---|--------------------------|-----|--|
| Mode | | | | | | | | | |
| Temperature | | | Humidity | | 56% RH | | | | |
| Test Result: | Pass | | | | Detector | | PK | | |
| 20dB Bandwidth | | | | | | | | | |
| Ref 10 di | 3m | *Att 20 dB | *RBW 10 *VBW 30 SWT 2. | 0 kHz | | -5. | .35 dBm | | |
| 10 | | | | | ndB [T BW 2 Temp 1 | .270000 | | A | |
| 1 PK MAXH | | | | <u> </u> | 2 Temp 2 | -25 .472870 [Tl ndl | .37 dBm 000 GHz | | |
| 20 | | | | V~ | 2 | -26 .475140 | .06 dBm | | |
| 30 | F | | | | T2 | | | | |
| -40 | | | | | | | | | |
| 50 | | | | | ſ | *************************************** | | 3DB | |
| 60 | | | | | | | | | |
| -70 | | | | | | | | | |

Date: 17.DEC.2024 15:23:56

Center 2.474 GHz

500 kHz/

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10.0 FCC ID Label

FCC ID: TUVET-8652D

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:



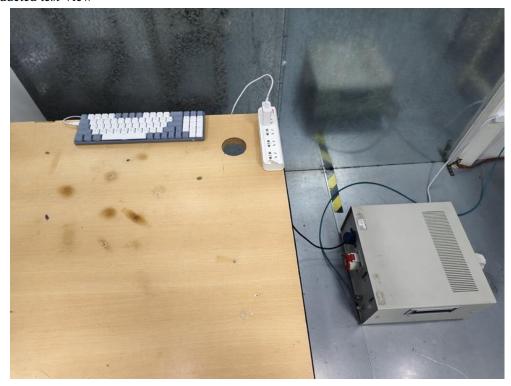
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11.0 Photo of testing

11.1 Conducted test View--



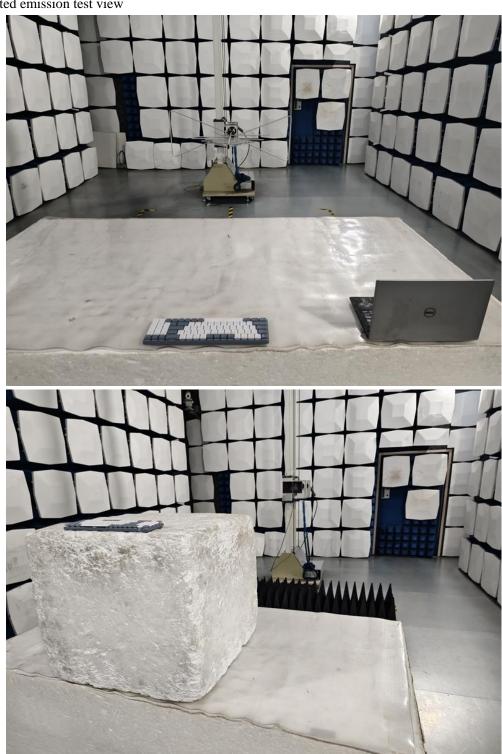
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Radiated emission test view



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11.2



Outside View-Keyboard





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Outside View-Keyboard





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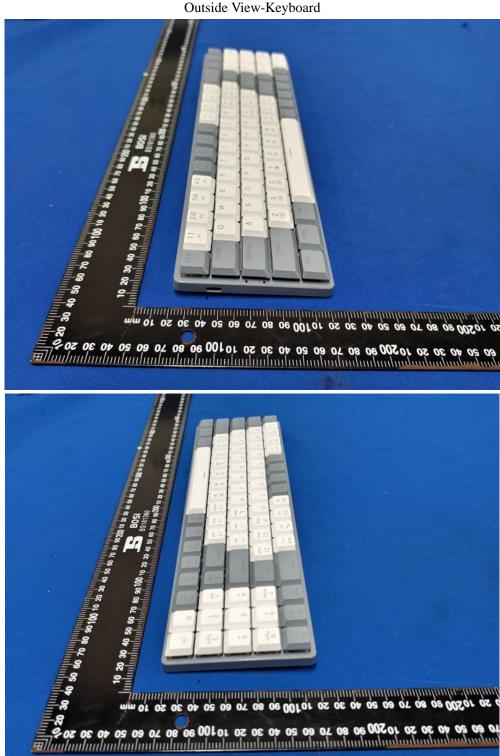
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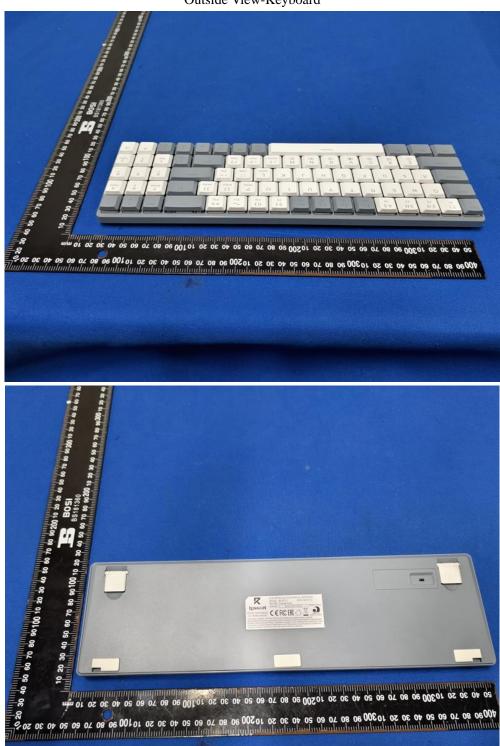
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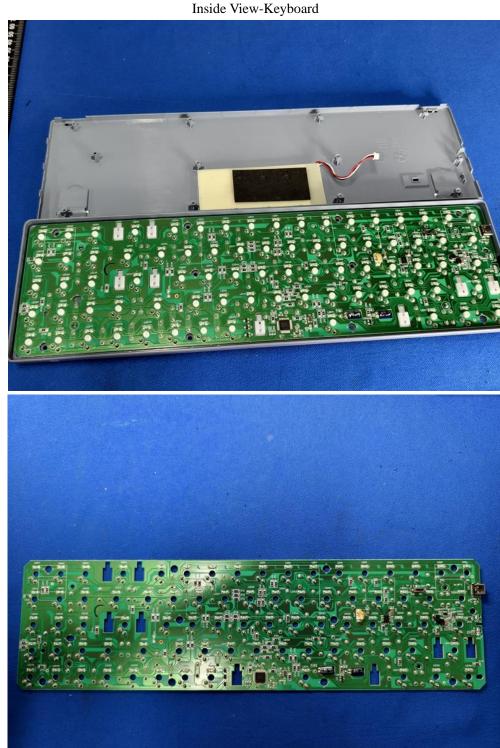
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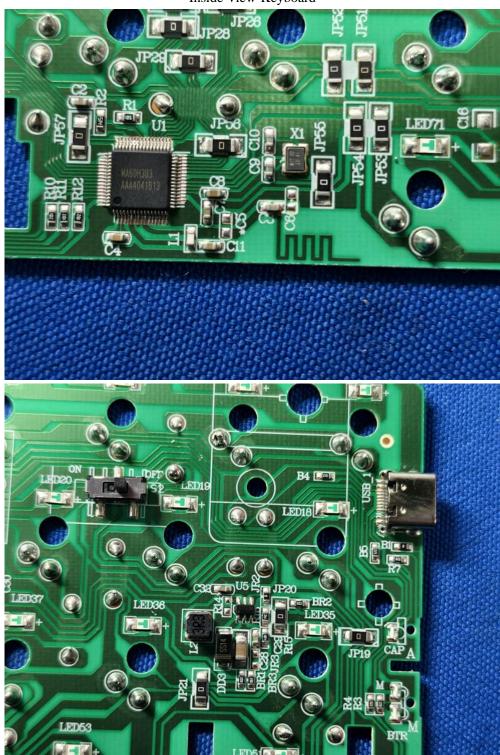
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Inside View-Keyboard



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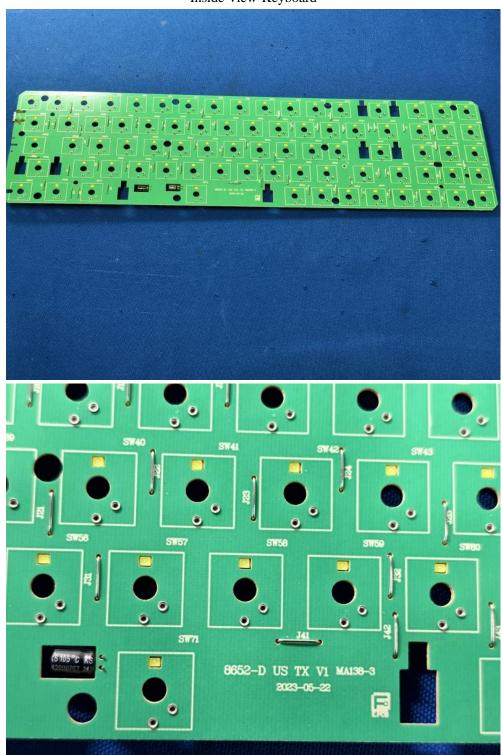
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Inside View-Keyboard



-- End of the Report--