

Report No.: TW2404067-01E

Applicant: Eastern Times Technology Co.,Ltd

Product: WIRED/2.4G/BT WIREL ESS GAMING MOUSE

Model No.: M814RGB-PRO, M814W-RGB-PRO, DS-4011

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

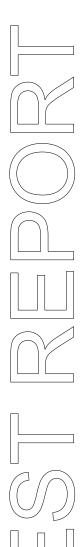
Dated: April 26, 2024

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

Report No.: TW2404067-01E

Date: 2024-04-26



## 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: Eastern Times Technology Co.,Ltd

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

Guangdong, China.

Telephone: -Fax: --

## 1.3 Description of EUT

Product: WIRED/2.4G/BT WIREL ESS GAMING MOUSE

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: M814RGB-PRO

Additional Model Name M814W-RGB-PRO, DS-4011 Rating: DC5V, 300mA or DC3.7V, 40mA

Battery DC3.7V, 1000mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2405-2475MHz

Channel List (Unit: MHz): 2405, 2463, 2441, 2426, 2408, 2466, 2445, 2422, 2414, 2471, 2459, 2436,

2419, 2475, 2453, 2447

Hardware Version: 4011-A TX V1 Software Version: c533d42f

Serial No.: RDM814RGB-PR023122501511

Antenna Designation PCB antenna with gain 2.34dBi Max (Get from the antenna specification)

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1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2024-04-03 to 2024-04-26

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

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	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100253	2023-07-14	2024-07-13
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2023-07-14	2024-07-13
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2023-07-14	2024-07-13
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	2024-07-17
Power meter	Anritsu	ML2487A	6K00003613	2023-07-14	2024-07-13
Power sensor	Anritsu	MA2491A	32263	2023-07-14	2024-07-13
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	2023-07-14	2024-07-13
EMI Test Receiver	RS	ESCS 30	834115/006	2023-07-14	2024-07-13
Spectrum	HP/Agilent	E4407B	MY50441392	2023-07-14	2024-07-13
Spectrum	RS	FSP	1164.4391.38	2023-07-14	2024-07-13
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA	1	2023-07-14	2024-07-13
RF Cable	Zhengdi	7m		2023-07-14	2024-07-13
Pre-Amplifier	Schwarebeck	BBV9743	#218	2023-07-14	2024-07-13
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2023-07-14	2024-07-13
LISN	SCHAFFNER	NNB42	00012	2023-07-14	2024-07-13
ESPI Test Receiver	R&S	ESPI 3	100379	2023-07-14	2024-07-13
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13

## 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 EU	T has been	tested a	ccording t	o the f	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

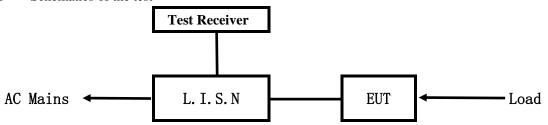
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## 5. Power Line Conducted Emission Test

## 5.1 Schematics of the test

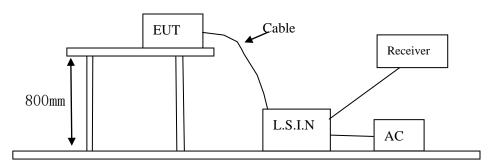


**EUT: Equipment Under Test** 

## 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 500hm/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.

16 channels are provided to the EUT

## A. EUT

Device	Manufacturer	Model	FCC ID
WIRED/2.4G/BT WIREL ESS GAMING MOUSE	Eastern Times Technology Co.,Ltd	M814RGB-PRO, M814W-RGB-PRO, DS-4011	TUVET-4011A

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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 $\mu$ V)			
(MHz)	Quasi-peak Level	Ave ag 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)

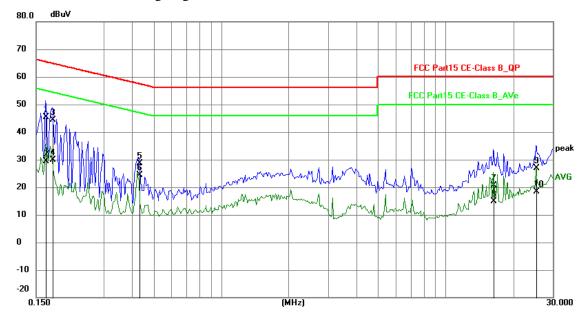
## **EUT Operating Environment**

Temperature: 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	0.1655	35.71	9.77	45.48	65.18	-19.70	QP	Р
2	0.1655	19.53	9.77	29.30	55.18	-25.88	AVG	Р
3	0.1773	34.49	9.77	44.26	64.61	-20.35	QP	Р
4	0.1773	20.11	9.77	29.88	54.61	-24.73	AVG	Р
5	0.4308	18.86	9.77	28.63	57.24	-28.61	QP	Р
6	0.4308	14.72	9.77	24.49	47.24	-22.75	AVG	Р
7	16.3770	10.24	10.46	20.70	60.00	-39.30	QP	Р
8	16.3770	4.33	10.46	14.79	50.00	-35.21	AVG	Р
9	25.3002	15.92	11.01	26.93	60.00	-33.07	QP	Р
10	25.3002	7.29	11.01	18.30	50.00	-31.70	AVG	Р

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

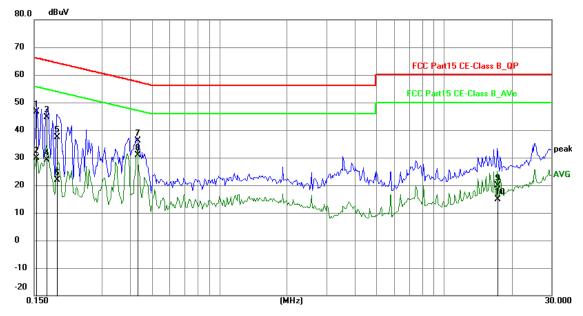
## **EUT Operating Environment**

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	0.1539	36.73	9.78	46.51	65.79	-19.28	QP	Р
2	0.1539	20.11	9.78	29.89	55.79	-25.90	AVG	Р
3	0.1695	34.87	9.77	44.64	64.98	-20.34	QP	Р
4	0.1695	19.31	9.77	29.08	54.98	-25.90	AVG	Р
5	0.1894	27.72	9.76	37.48	64.06	-26.58	QP	Р
6	0.1894	12.10	9.76	21.86	54.06	-32.20	AVG	Р
7	0.4308	26.26	9.77	36.03	57.24	-21.21	QP	Р
8	0.4308	20.99	9.77	30.76	47.24	-16.48	AVG	Р
9	17.2194	9.26	10.51	19.77	60.00	-40.23	QP	Р
10	17.2194	4.36	10.51	14.87	50.00	-35.13	AVG	Р

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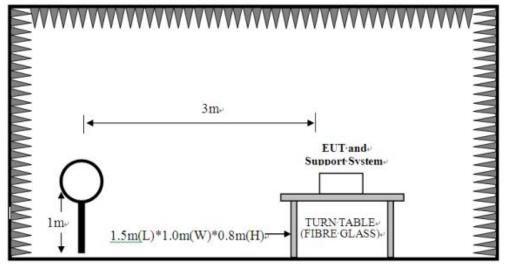


## **6** Radiated Emission Test

- 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

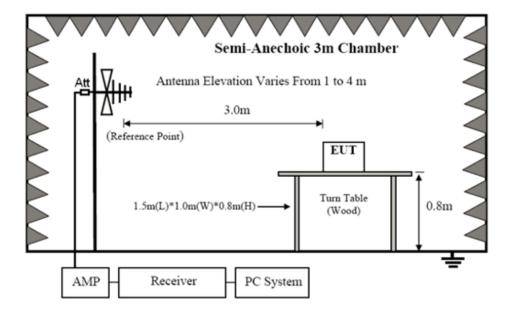


For radiated emissions from 30MHz to1GHz

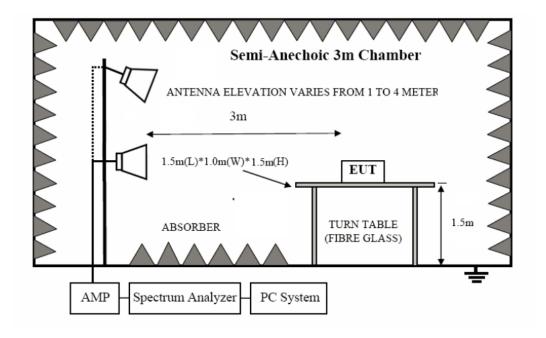
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For radiated emissions above 1GHz



- 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 Stre	ength of Fundame	ntal (3m)	Field S	trength of Harmo	nics (3m)	
(MHz)	mV/m	dBu	V/m	uV/m	dBuV/m		
2400-2483.5	50	94 (Average) 114 (Peak)		500	54 (Average)	74 (Peak)	

Note:

- 1. RF Field Strength  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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 $\mu$ 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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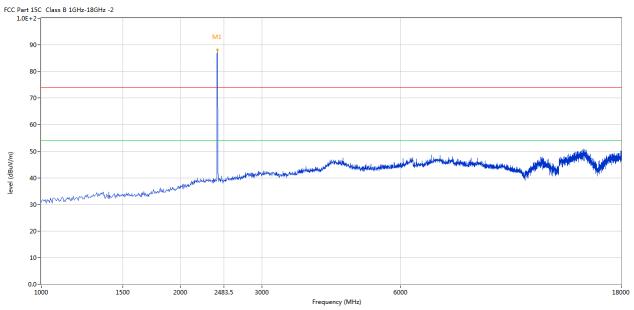


## 6.5 Test result

## **A** Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2405MHz

## Horizontal



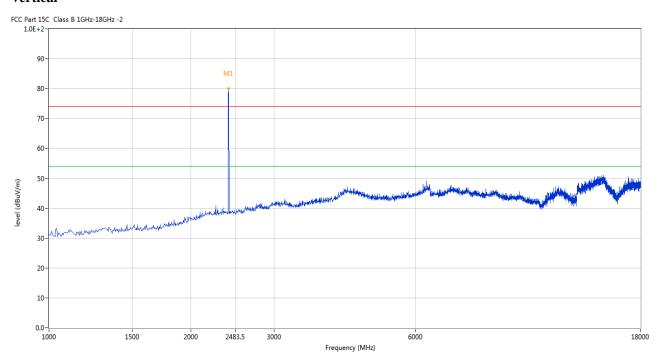
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2405	88.22	-3.57	114.0	-25.78	Peak	107.00	100	Horizontal	Pass

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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	2405	80.02	-3.57	114.0	-33.98	Peak	33.00	100	Vertical	Pass

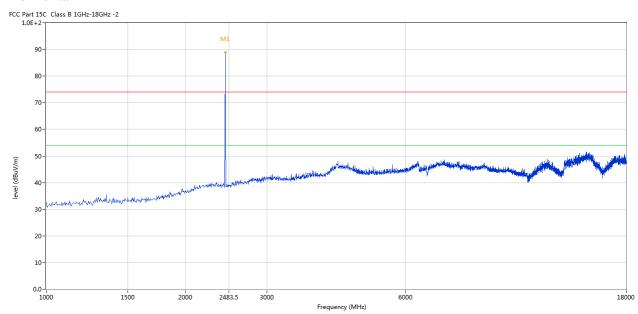
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Please refer to the following test plots for details: Middle Channel-2441MHz

## **Horizontal**



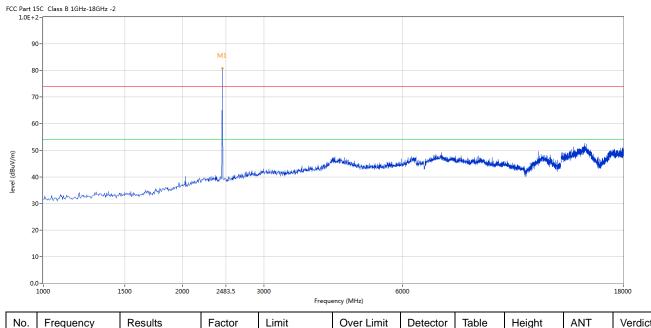
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	88.97	-3.57	114.0	-25.03	Peak	218.00	100	Horizontal	Pass

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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	2441	80.75	-3.57	114.0	-33.25	Peak	78.00	100	Vertical	Pass

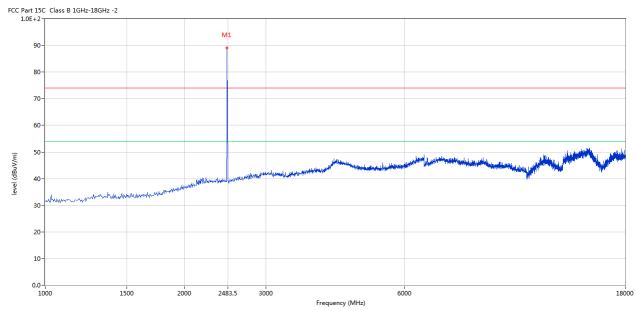
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Please refer to the following test plots for details: High Channel-2475MHz

## **Horizontal**



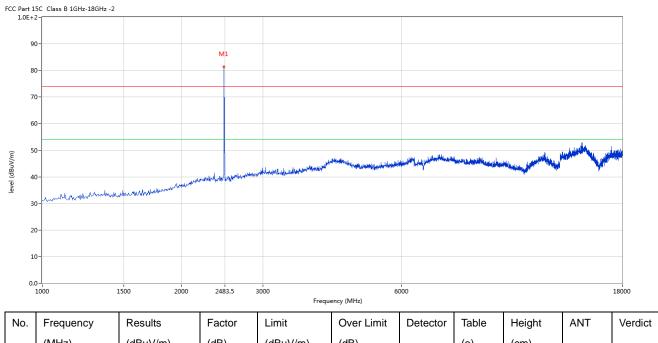
Ī	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
Ī	1	2475	89.01	-3.57	114.0	-24.99	Peak	173.00	100	Horizontal	Pass

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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	2475	81.27	-3.57	114.0	-32.73	Peak	16.00	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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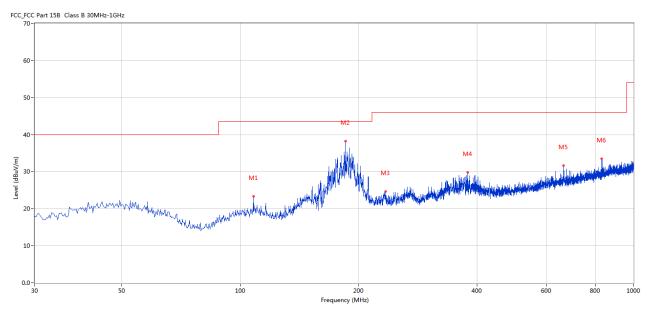


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	108.065	23.31	-13.42	43.5	20.19	Peak	289.00	100	Horizontal	Pass
2	185.404	38.19	-14.87	43.5	5.31	Peak	268.00	100	Horizontal	Pass
3	234.376	24.71	-12.53	46.0	21.29	Peak	258.00	100	Horizontal	Pass
4	378.628	29.77	-9.29	46.0	16.23	Peak	0.00	100	Horizontal	Pass
5	664.949	31.63	-4.42	46.0	14.37	Peak	286.00	100	Horizontal	Pass
6	831.262	33.54	-2.86	46.0	12.46	Peak	29.00	100	Horizontal	Pass

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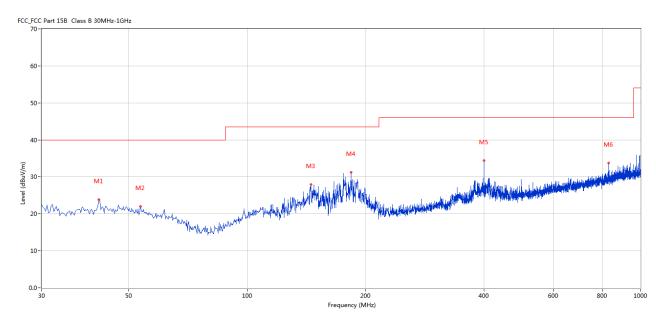


## Radiated Emission In Vertical (30MHz----1000MHz)

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	41.880	23.82	-11.72	40.0	16.18	Peak	247.00	100	Vertical	Pass
2	53.517	22.06	-11.52	40.0	17.94	Peak	104.00	100	Vertical	Pass
3	145.159	27.92	-17.26	43.5	15.58	Peak	225.00	100	Vertical	Pass
4	183.464	31.26	-14.96	43.5	12.24	Peak	253.00	100	Vertical	Pass
5	399.963	34.45	-8.57	46.0	11.55	Peak	255.00	100	Vertical	Pass
6	831.262	33.71	-2.86	46.0	12.29	Peak	142.00	100	Vertical	Pass

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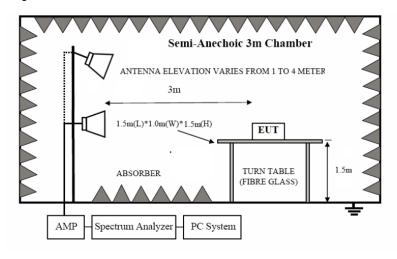


## 7. Band Edge

## 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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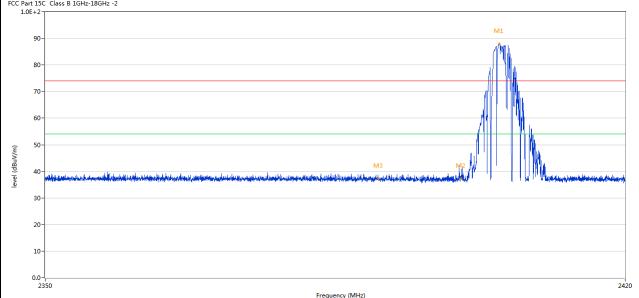
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#### 7.6 Test Result

7.0 Test Result			
Product:	WIRED/2.4G/BT WIREL ESS GAMING MOUSE	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 1.0E+2-			M1

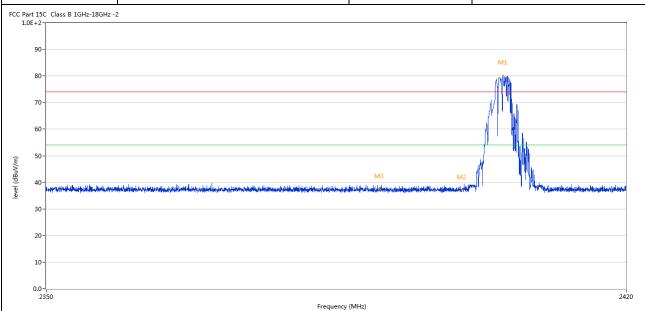


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2404.586	88.04	-3.57	74.0	14.04	Peak	230.00	100	Horizontal	N/A
2	2400.000	37.26	-3.57	74.0	-36.74	Peak	177.76	100	Horizonta	Pass
3	2390.000	37.24	-3.53	74.0	-36.76	Peak	111.59	100	Horizonta	Pass

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Product:	WIRED/2.4G/BT WIREL ESS GAMING MOUSE	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		

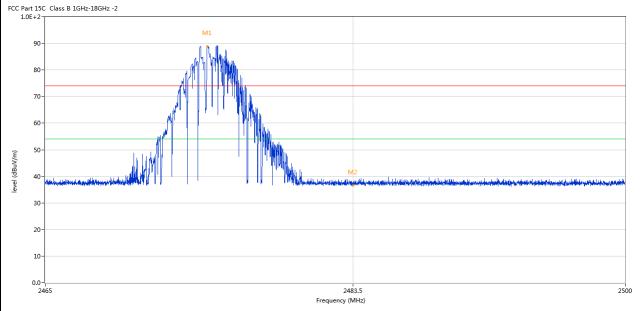


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2404.954	80.01	-3.57	74.0	6.01	Peak	52.00	100	Vertical	N/A
2	2400.000	37.04	-3.57	74.0	-36.96	Peak	301.18	100	Vertical	Pass
3	2390.000	37.35	-3.53	74.0	-36.65	Peak	56.29	100	Vertical	Pass

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Product:	WIRED/2.4G/BT WIREL ESS GAMING MOUSE	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		-



No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2474.728	88.94	-3.57	74.0	14.94	Peak	228.00	100	Horizontal	N/A
2	2483.500	36.62	-3.57	74.0	-37.38	Peak	66.78	100	Horizontal	Pass

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]	Product:		D/2.4G/BT AMING N	WIREL ESS MOUSE		Detector		Ve	ertical	
	Mode	Ke	eping Tran	nsmitting	Tes	st Voltage		DO	C3.7V	
Te	mperature		24 deg.	С,	Н	lumidity		56% RH		
Те	est Result:		Pass							
CC Part 1	15C Class B 1GHz-18GHz	-2								
8	10-	A	M1							
eve  (dBuV/m)	10			WH Museuman	M2 Merienienber og Abdibleisenber om	neiki igongalaphi phi asain p	न्द्रं नीव्यक्त करणेन्द्रश्चन्त्रं स्थापन	deministrucții istoreatii lugi	haista võiseleks, ohtekseen	the Alba Friend
(m/\gamma(\pi \mathre{\pi} \rangle \frac{1}{2}	10-milyonyidaani,anninasiihmada	Leasing Page Service Control of the		White Fire	M2  Wienlands, and distributions  2483.5  requency (MHz)	yechi kampateeti vythi essi in p	orderfelder ge in the production of the contraction	de de significações de de de significações de de significações de de significações de de significações de de s	haista staroletini (teksees	2500
(m/\gamma(\pi \mathre{\pi} \rangle \frac{1}{2}	10	Results	Factor	Limit	2483.5	Detector	Table	Height	ANT	2500
(m//ngg/) avail (m/ngg/) 3 3 2 2 1 0.	0	Results (dBuV/m)	Factor (dB)	1	2483.5 requency (MHz)					
(m//ngg/) avail (m/ngg/) 3 3 2 2 1 0.	00			Limit	2483.5 requency (MHz)		Table	Height		2500

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 2.34dBi Max. It fulfills the requirement of this section. Test Result: Pass

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Product:	WIRED		T WIREL MOUSE	ESS GAM	IING	Test Mode:		Keep transmitting				
Mode		Keeping Transmitting				Tes	st Voltage		DC3.7V			
Temperature		2	24 deg. C,			Н	umidity		56% RH			
Test Result:			Pass			Γ	Detector		PK	<u> </u>		
20dB Bandwidth		2	2.124MHz									
Ref Lvl 10 dBm	r	ıdB	1 [T1 r 20.	00 dB	VI	BW BW WT	100 ki 300 ki 5 m	Ηz	? Att	20 dB	ı	
10				1			<b>V</b> 1	[T1]	2.40498	.44 dBm 497 GHz	Æ	
-10				WW/	لمسالة	1/	nas BW VT1	[T1]	2.12424	.00 dB 850 MHz .46 dBm		
-20		T Å.						[2[T1]	2.40392 -19 2.40604	285 GHz .59 dBm 709 GHz		
-30		J						Ly.			1M	
-40	ل بالان	ļ <sup>t</sup>						Yy.	dest of the sale	la.		
-50	W									Mary		
-60												
-70												
-80						$\dashv$						
-90 Center 2.	405 GH:	Z		500	kHz/				Spa	n 5 MHz		

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Product:	WIREI	WIRED/2.4G/BT WIREL ESS C MOUSE			ING	Т	est Mode:		Keep tra	nsmitting	
Mode		Keepin	g Transmitting			Test Voltage		;	DC3.7V 56% RH		
Temperature		2	4 deg. C,				Humidity				
Test Result:			Pass				Detector		F	PΚ	
20dB Bandwidth		2.	104MHz								
(s)		Marker	1 [T1 r	ndB]	F	RBW	100 k	Hz R	F Att	20 dB	
Ref Lvl		ndB	20.	00 dB	7	/BW	300 k	Hz			
10 dBm		BW 2	.104208	342 MHz	S	TWS	5 m	s U	nit	dBm	
10							▼1	[T1]	-1 2.44050	.01 dBm	A
-1.0				le Mico	4		ndE BW <b>V</b> TI	(T1)	2.10420 -20	.00 dB 842 MHz .81 dBm	
-20		T1	, M		<b>1</b> 00	V	\ V <sub>V</sub>	? [T1] 02	2.43993 -21	287 GHz .67 dBm	
1 <b>MAX</b>								WA LE	2.44203	707 GHz	1MA
-40	k Ladenta								Allera	A P	
-50 AL MINA	A. O.	ſ						40	welle.	Year l	
-60											
-70											
-80											
-90 Center 2		Hz 024 17	:15:39	500	kHz/	,			Spa	n 5 MHz	ļ

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Product:	WIRED/2.4G/	WIRED/2.4G/BT WIREL ESS GAMING MOUSE Keeping Transmitting				est Mode:		Keep tra	nsmitting	
Mode	Kee					est Voltage		DC3.7V		
Temperature		24 deg. C,	deg. C,			Humidity		56% RH		
Test Result:		Pass				Detector		PK		
20dB Bandwidth		2.154MHz								
(R)	Marke	er 1 [T1 n	ndB]	RI	BW	100 k	Hz R	F Att	20 dB	
Ref Lvl 10 dBm	ndB BW	20.	00 dB 862 MHz		W T	300 k 5 m		nit	dBm	
10			1			▼1	[T1]	2.47500	.74 dBm	A
-10			Ve All	/wh		ndB BW <b>_ ▽</b> Tl	[T1]	2.15430 -2.0	.00 dB 862 MHz .68 dBm	
-20			*			WA	T2 <sup>[T1]</sup>	2.47391	283 GHz	
1MAX		<i>f</i>					Y	2.47606	/13 GHz	1MA
-40	YLAN IA						) lite	- Her	λ.	
-50									bury	
-60										
-70										
-80										
-90 Contor 3	475 611-		500	ku-/				C~-	n 5 MII-	
Center 2 Date: 18	.475 GHZ 3.APR.2024	17:41:31	300 .	<u>кп</u> г/					n 5 MHz	

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## 10.0 FCC ID Label

## FCC ID: TUVET-4011A

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-Mouse



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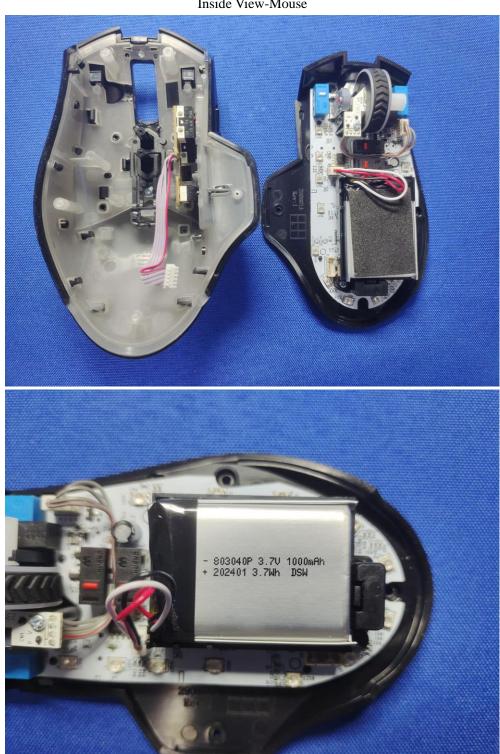
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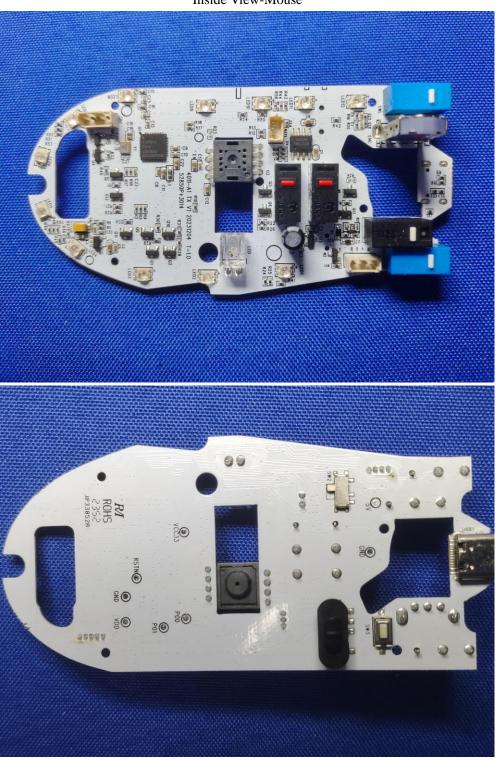
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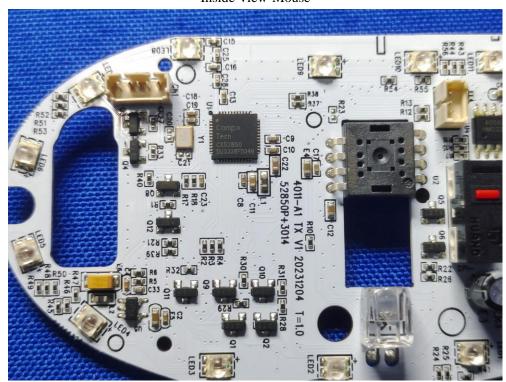
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## Inside View-Mouse



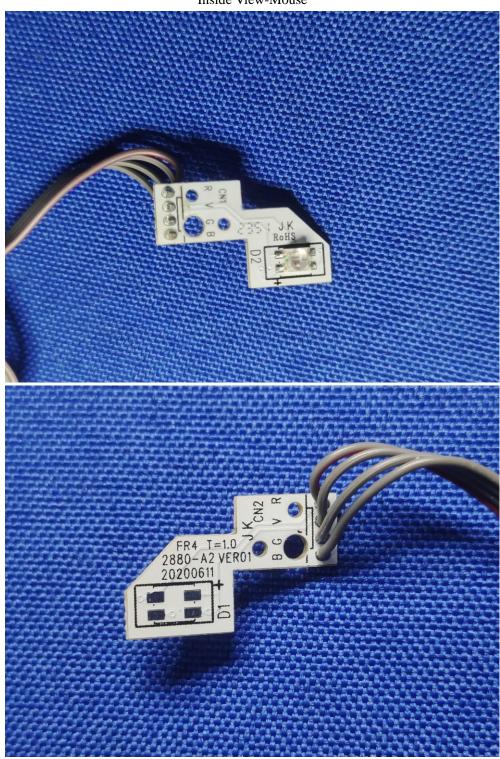
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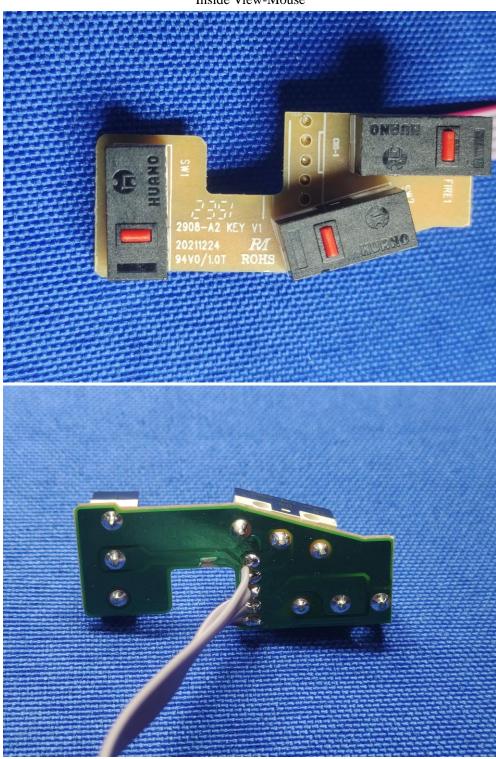
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