



Report No.: FCC1905092 File reference No.: 2019-05-27

Applicant: Shenzhen Star Sources Electronic Technology Co., Ltd.

Product: Wireless Mouse

Model No.: BRM2030B

Brand Name: brookstone

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.4&FCC Part 15 Subpart C, Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

Jack Chung

Jack Chung

Manager

Dated: May 27, 2019

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TESTING LABORATORIES

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

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

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Special Statement:

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

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

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

CNAS-LAB Code: L2292

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

FCC-Registration No.: 744189

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

Date: 2019-05-27



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: Shenzhen Star Sources Electronic Technology Co., Ltd.

Address: Room1102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District, Shenzhen,

China

Telephone: 0755 -86397260 Fax: 0755-26609516

1.3 Description of EUT

Product: Wireless Mouse

Manufacturer: Shenzhen Star Sources Electronic Technology Co., Ltd.

Address: Room1102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District,

Shenzhen, China

Brand Name: brookstone
Model Number: BRM2030B

Additional Model Name N/A

Input Voltage: DC3.7V, Li-ion battery

Modulation Type: GFSK

Operation Frequency 2402-2480MHz

Channel Separation 2MHz

Antenna Designation PCB antenna with gain 0dBi Max

Hardware Version: V1.1 Software Version: V2.2

1.4 Submitted Sample

2 Sample

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1.5 Test Duration 209-05-20 to 2019-05-27

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

1.7 Test Engineer

Terry Tang The sample tested by

Print Name: Terry Tang

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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	2018-06-22	2019-06-21		
Ultra Broadband ANT	R&S	HL562	100157	2018-06-18	2019-06-17		
Loop Antenna	EMCO	6507	00078608	2018-06-25	2019-06-24		
Spectrum	R&S	FSIQ26	100292	2018-06-22	2019-06-21		
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2018-06-25	2019-06-24		
Horn Antenna	R&S	BBHA 9120D	9120D-631	2018-08-24	2019-08-23		
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2018-07-04	2019-07-03		
9*6*6 Anechoic			N/A	2018-02-07	2021-02-06		
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2018-06-22	2019-06-21		
Spectrum	RS	FSP	1164.4391.38	2019-01-18	2020-01-17		
RF Cable	Zhengdi	ZT26-NJ-NJ-8 M/FA		2018-05-23	2020-05-22		
RF Cable	Zhengdi	7m		2019-03-08	2020-03-07		
RF Switch	EM	EMSW18	060391	2018-06-22	2019-06-21		
Pre-Amplifier	Schwarebeck	BBV9743	#218	2018-06-22	2019-06-21		
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2018-08-05	2019-08-04		
DC Power Supply	Jingtong	JT12098	WYK-305	2018-08-20	2019-08-19		
LISN	SCHAFFNER	NNB42	00012	2019-01-08	2020-01-07		

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3.0 Technical Details

3.1 Summary of test results

The EUT has been tested according to the following specifications:

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

3.2 Test Standards

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

4.0 EUT Modification

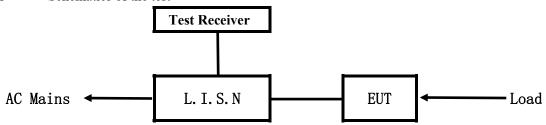
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

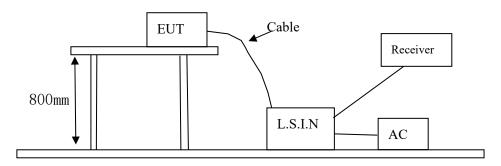


EUT: Equipment Under Test

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.

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.

One channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID	
Wireless Mouse	Shenzhen Star Sources Electronic	BRM2030B	ZJEST-892	
Wifeless Mouse	Technology Co., Ltd.	DKWZ030D		

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B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	h.TV	S012BES0500200	Input:100-240V~, 50/60Hz,0.5A;
			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 15.107 and 15.207

Engagement (MHz)	Class A Lir	nits (dB µ V)	Class B Limits (dB µ V)		
Frequency(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level	
$0.15 \sim 0.50$	79.0	66.0	66.0~56.0*	56.0~46.0*	
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0	
$5.00 \sim 30.00$	73.0	60.0	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

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

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

EUT Operating Environment

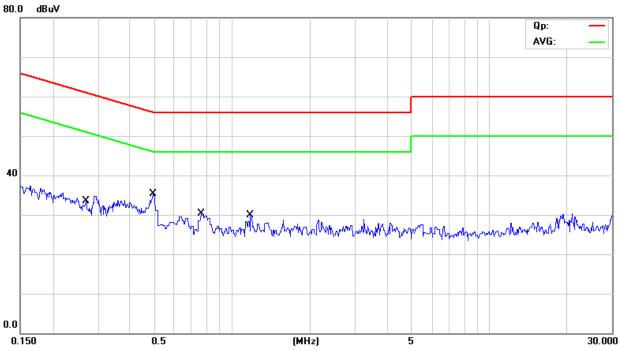
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Transmitting

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBu∀	dBu∨	dB	Detector	Comment
1	0.2700	10.20	9.75	19.95	61.12	-41.17	QP	
2	0.2700	-17.70	9.75	-7.95	51.12	-59.07	AVG	
3 *	0.4931	20.50	9.77	30.27	56.12	-25.85	QP	
4	0.4931	-5.40	9.77	4.37	46.12	-41.75	AVG	
5	0.7652	1.30	9.78	11.08	56.00	-44.92	QP	
6	0.7652	-27.10	9.78	-17.32	46.00	-63.32	AVG	
7	1.1828	5.50	9.79	15.29	56.00	-40.71	QP	
8	1.1828	-16.30	9.79	-6.51	46.00	-52.51	AVG	

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

EUT Operating Environment

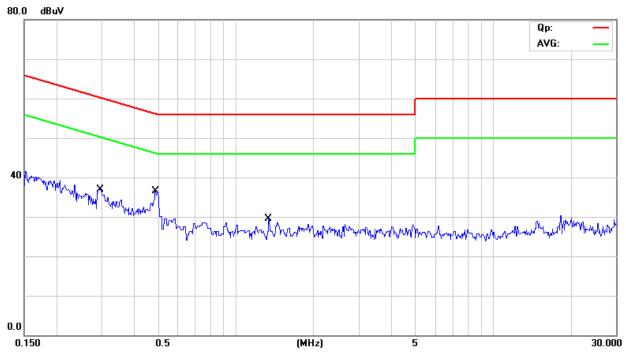
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Transmitting

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∀	dB	dBu∀	dBu∨	dB	Detector	Comment
1 *	0.2950	25.50	9.76	35.26	60.38	-25.12	QP	
2	0.2950	-14.10	9.76	-4.34	50.38	-54.72	AVG	
3	0.4855	18.30	9.77	28.07	56.24	-28.17	QP	
4	0.4855	-4.90	9.77	4.87	46.24	-41.37	AVG	
5	1.3424	4.20	9.79	13.99	56.00	-42.01	QP	
6	1.3424	-19.90	9.79	-10.11	46.00	-56.11	AVG	

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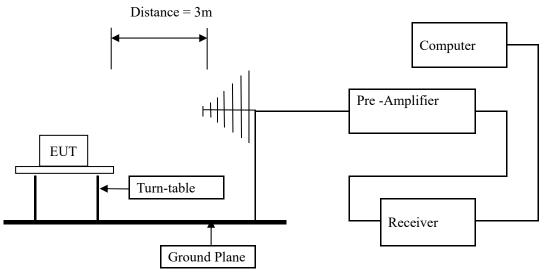
Date: 2019-05-27



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



- 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	eld Strength of Fundamental (3m)			trength of Harmo	onics (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 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)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 5. 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.
- 6. Battery full charged were used during tests.

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6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

Product:	Wireless Mouse	Test Mode:	Keep transmitting-Low Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25℃
	Data		
Test Voltage:	DC3.7V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin	
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)	
2402	73.71(PK)	Н	114/94	-20.29	
2402	67.83(PK)	V	114/94	-26.17	
4804	48.75(PK)	Н	74/54	-5.25	
4804	54.82(PK)/35.16(AV)	V	74/54	-19.18/-18.84	
7206	206		74/54		
9608		H/V	74/54		
12010		H/V	74/54		
14412		H/V	74/54		
16814		H/V	74/54		
19216		H/V	74/54		
21618		H/V	74/54		
24020		H/V	74/54		

Note: (1) PK= Peak, AV= Average

- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss.
- (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

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Product:	Wireless Mouse	Test Mode:	Keep transmitting-Middle Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25℃
	Data		
Test Voltage:	DC3.7V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin	
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)	
2440	71.09(PK)	Н	114/94	-22.91	
2440	67.76(PK)	V	114/94	-26.24	
4880	47.92(PK)	Н	74/54	-6.08	
4880	54.84(PK)/35.22(AV)	V	74/54	-19.16/-18.78	
7320		H/V 74/54			
9760		H/V	74/54		
12200		H/V	74/54		
14640		H/V	74/54		
17080		H/V	74/54		
19520	19520		74/54		
21960		H/V	74/54		
24400		H/V	74/54		

Note: (1) PK= Peak, AV= Average

- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss.
- (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

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Product:	Wireless Mouse	Test Mode:	Keep transmitting-High Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25℃
	Data		
Test Voltage:	DC3.7V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin	
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)	
2480	75.26(PK)	Н	114/94	-18.74	
2480	68.32(PK)	V	114/94	-25.68	
4960	47.81(PK)	Н	74/54	-6.19	
4960	54.11(PK)/34.89(AV)	V	74/54	-19.89/-19.11	
7440	7440		74/54		
9920		H/V	74/54		
12400		H/V	74/54		
14880		H/V	74/54		
17360		H/V	74/54		
19840	19840		74/54		
22320		H/V			
24800		H/V	74/54		

Note: (1) PK= Peak, AV= Average

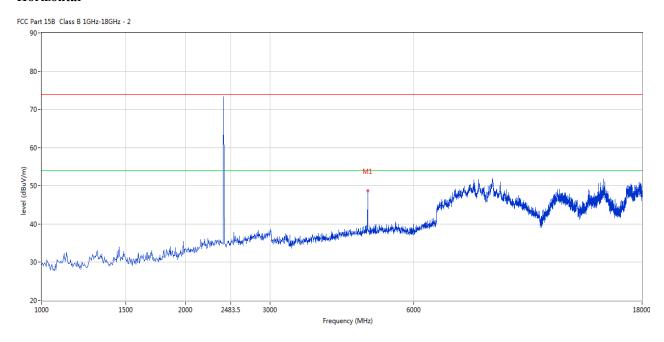
- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss.
- (3)Margin=Emission-Limits
- (4)According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting

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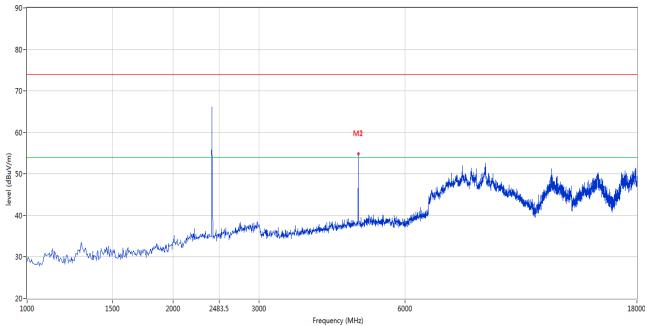
Please refer to the following test plots for details: Low Channel

Horizontal



Vertical





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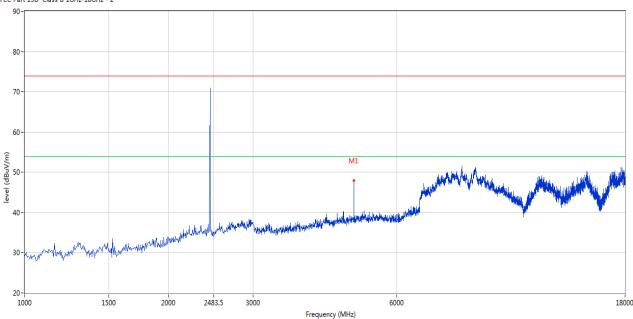
Date: 2019-05-27



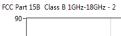
Please refer to the following test plots for details: Middle Channel

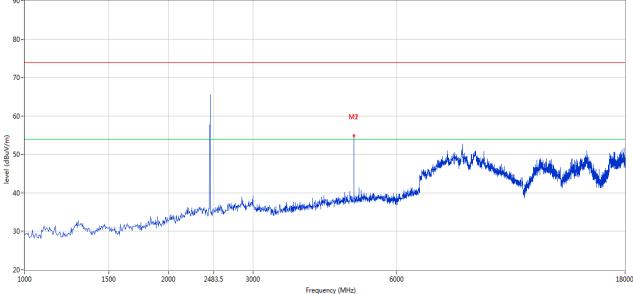
Horizontal





Vertical





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

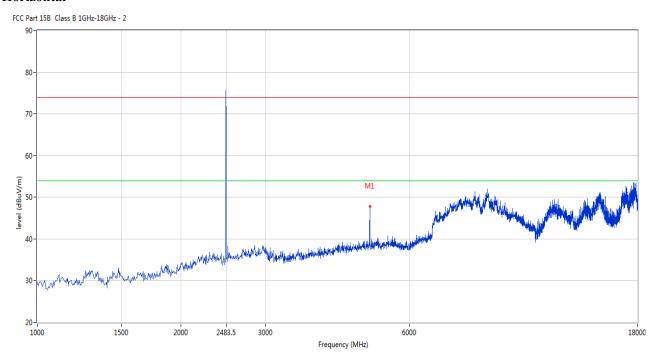
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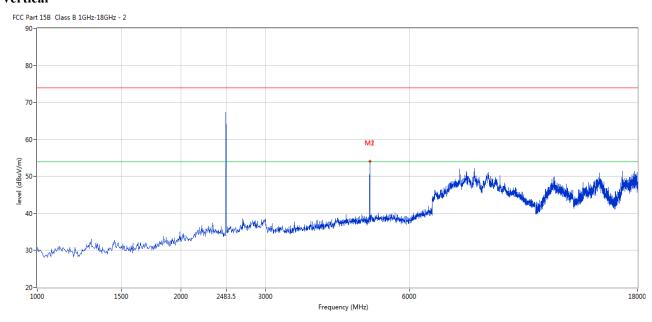


Please refer to the following test plots for details: High Channel

Horizontal



Vertical



For emission above 18GHz, It is only the floor noise. No necessary to take down.

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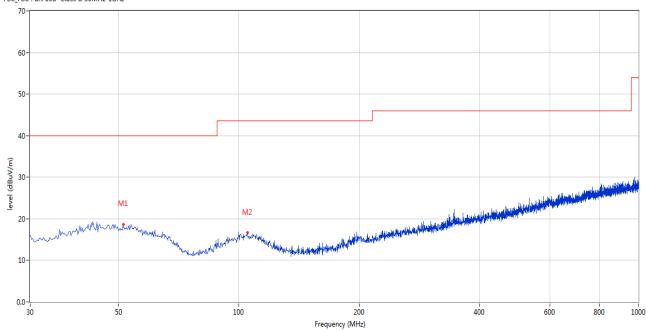
B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual

FCC_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency	Results	Factor (dB)	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(o)	(cm)		
1	51.335	18.67	-11.41	40.0	-21.33	Peak	360.00	200	Н	Pass
2	104.914	16.67	-13.23	43.5	-26.83	Peak	360.00	200	Н	Pass

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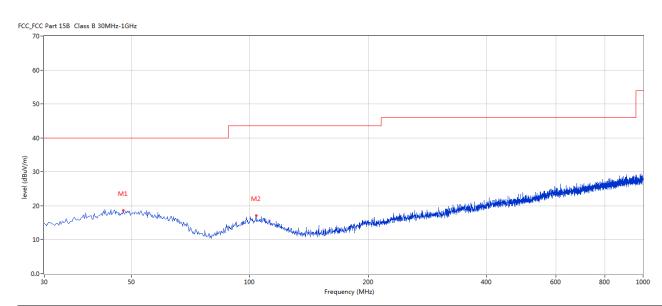


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequen	Results	Factor	Limit	Over	Detector	Table (o)	Height	ANT	Verdict
	cy (MHz)	(dBuV/m	(dB)	(dBuV/m	Limit			(cm)		
))	(dB)					
1	47.698	18.56	-11.34	40.0	-21.44	Peak	155.00	200	V	Pass
2	103.702	17.12	-13.35	43.5	-26.38	Peak	360.00	200	V	Pass

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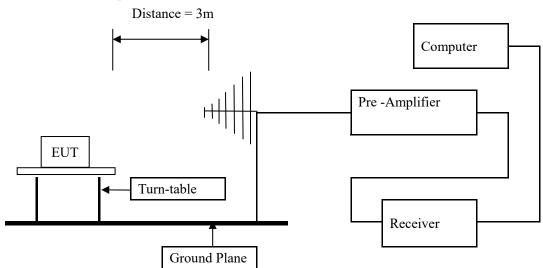


7. Band Edge

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
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

7. 2 Radiated Test Setup



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

7.3 Configuration of The EUT

Same as section 5.3 of this report

7.4 EUT Operating Condition

Same as section 5.4 of this report.

7.5 Band Edge Limit

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

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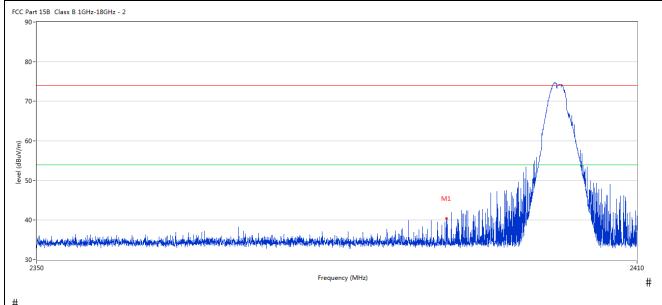
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7.6 Test Result

Product:	Wire	eless Mouse	Polarity	Horizontal
Mode	Keepin	g Transmitting	Test Voltage	DC3.7V
Temperature	24	4 deg. C,	Humidity	56% RH
Test Result:		Pass		-
2400MHz	PK (dBμV/m) 46.13		Limit	$74~dB\mu V/m$
2400MHz	AV (dBμV/m)	1	Limit	54 dBμV/m
2390 MHz	PK (dBμV/m)	40.37	Limit	$74~\mathrm{dB}\mu\mathrm{V/m}$
2390 MHz	AV (dBμV/m)			$54~dB\mu V/m$

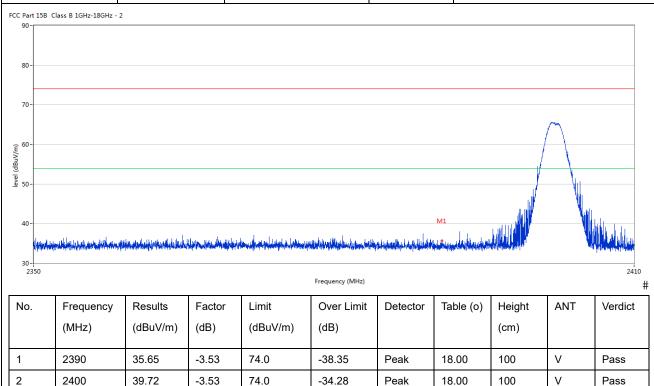


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2390	40.37	-3.53	74.0	-33.63	Peak	94.00	100	Н	Pass
2	2400	46.13	-3.53	74.0	-27.87	Peak	94.00	100	Н	Pass

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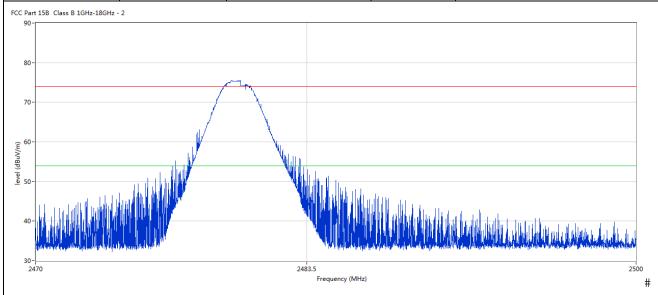
Product:	Wire	less Mouse	Detector	Vertical
Mode	Keeping	g Transmitting	Test Voltage	DC3.7V
Temperature	24	4 deg. C,	Humidity	56% RH
Test Result:		Pass		1
2400MHz	PK (dBμV/m) 39.72		Limit	$74~\mathrm{dB}\mu\mathrm{V/m}$
2400MHz	AV (dBμV/m)		Limit	54 dBμV/m
2390 MHz	PK (dBμV/m)	35.65	Limit	$74~\mathrm{dB}\mu\mathrm{V/m}$
2390 MHz	AV (dBμV/m)		Limit	54 dBμV/m



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Product:	Wire	eless Mouse	Polarity	Horizontal
Mode	Keeping	g Transmitting	Test Voltage	DC3.7V
Temperature	24	4 deg. C,	Humidity	56% RH
Test Result:		Pass		1
2483.5MHz	PK (dBμV/m) 52.89		Limit	$74~dB\mu V/m$
2483.5MHz	AV (dBμV/m)	AV (dBμV/m)		54 dBμV/m



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2483.5	52.89	-3.57	74.0	-21.11	Peak	118.00	100	Н	Pass
2	2483.5	35.68	-3.57	54.0	-18.32	AV	118.00	100	Н	Pass

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Produ	ıct:	W	ireless I	Mouse		Detector		Ve	ertical	
Mod	de	Keep	ing Trai	nsmitting	To	Cest Voltage DC3.7V			C3.7V	
Temper	ature		24 deg.	. С,]	Humidity		56	% RH	
Test Re	esult:		Pass	1						
2483.5	MHz	PK (dBμV/m)		48.23		Limit		74 d	lBμV/m	l
2483.5	MHz	AV (dBμV/m)				Limit		54 d	lBμV/m	l
C Part 15B Class	s B 1GHz-18GHz - 2									
80-										
70-			1							
60-			<i>y</i>							
50-										
2 50-										
						lt m				
40-		ALIAN DALAMAN					udadda Harda y y dagadha da	minute and it was to	pied mi istic	والبيناه فالمفارية
		SANIKANIS SANA.		11 km						
30- 2470				2483.5 Fr	requency (MHz)	<u> </u>				250
					requency (MHz)					250
30- 2470	Frequency	Results	Factor		over Limit	Detector	Table (o)	Height	ANT	Verdict
30 - 2470	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Fı	Г	Detector	Table (o)	Height (cm)	ANT	

Note: 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 0dBi Max. It fulfills the requirement of this section.

Test Result: Pass

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Product:	Wireless Mouse				Test Mode:		<u>: </u>	Keep transmitting		
Mode	Keeping Transmitting				Test Voltage		e	DC3.7V		
Temperature	24 deg. C, Pass 1.85MHz				Humidity Detector			56% RH PK 		
Test Result:										
OdB Bandwidth										
>	Delta	1 [T1]		RI	ЗW	30]	kHz	RF Att	10 dB	
Ref Lvl		-0.	43 dB	VI	ВW	100	kHz			
0 dBm		1.853707	741 MHz	SV	VТ	14 t	ms	Unit	dBr	m
0						v ₁	[T1]	-4	1.91 dBr	n Z
10								2.4010	9319 GHz	
-10						<u>^</u> 1	[T1]	_	0.43 dB	
						∇2	[T1]	1.8537	0741 MHz	Z
-20								2.4020	2505 GH2	Z
-30			~ [^]	<u> </u>	Jun.	l _{y A m}				1M
-40 -D1 -42.16	dBm	7,4				1/4				1
50	, MA						m.			
-50	, Jun V							The same		
-60									The same of the sa	۸
-70										
-80										
-90										1
100										
Center 2.40)2 GHz		500	kHz/				Spa	an 5 MHz	Z

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Product:		Wir	eless Mous	se	Т	est Mode	:	Keep trai	nsmitting		
Mode		Keeping Transmitting				Test Voltage		DC3.7V			
Temperature		24 deg. C,				Humidity		56% RH			
Test Result:	Pass					Detector		PK			
20dB Bandwidth			1.89MHz					-	_		
(i)		Delta 1	L [T1]		RBW	30]	kHz	RF Att	10 dB		
Ref Lvl				01 dB	VBW	100					
0 dBm		1	L.893787	58 MHz	SWT	14 1	ms	Unit	dBm	ı	
0						v ₁	[T1]	-42	.39 dBm	A	
								2.43909	319 GHz	A	
-10						<u></u> 1	[T1]	C	.01 dB		
								1.89378			
-20				•	2	∇_2	[T1]	-22	.90 dBm		
				\wedge	My.			2.44002	505 GHz		
-30				~~ ·	<u>₩</u> ,						
1MAX			٨	\mathcal{N}	\ \ \\\	Μ_				1MA	
-40			1 NY			MVVI					
—D1 −42.	9 dBm—	1.0	, 			\ <u>\</u>	<u>nl</u>				
5.0		,/^(\) \					W.M.				
-50		<u> </u>					\ \	1			
	<i>M</i>							Uh mi	lu.		
-60	VAN TO THE STATE OF THE STATE O							w	Tylu .		
M									The state of the s		
-70											
-80											
-90											
100											
-100 Center 2	.44 GH	Z		500	kHz/			Spa	n 5 MHz	1	
	.MAY.2		:19:18					-			
שמופי 21	·MAY · Z	1019 I/	· 1 2 · 1 6								

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Mode Keeping Transmitting Test Voltage DC3.7V Temperature 24 deg. C, Humidity 56% RH Test Result: Pass Detector PK 20dB Bandwidth 1.93MHz Ref Lvl 0.11 dB VBW 100 kHz RF Att 10 dB 0 dBm 1.93386774 MHz SWT 14 ms Unit dBm -10 A1 [T1] -42.88 dBr 2.47904309 GHz -11 dB 1.93386774 MHz -20 -23.18 dBr -23.18 dBr -23.18 dBr -23.18 dBr	A
Test Result: Pass Detector PK 1.93MHz Delta 1 [T1] RBW 30 kHz RF Att 10 dB VBW 100 kHz 0 dBm 0 dBm 1.93386774 MHz SWT 14 ms Unit dBm 2.47904309 GHz -10 A1 [T1] -42.88 dBm 2.47904309 GHz	A
20dB Bandwidth 1.93MHz	A
Delta 1 [T1] RBW 30 kHz RF Att 10 dB Ref Lvl 0.11 dB VBW 100 kHz 0 dBm 1.93386774 MHz SWT 14 ms Unit dBm V1 [T1] -42.88 dBm 2.47904309 GHz -10	A
Ref Lvl 0.11 dB VBW 100 kHz 0 dBm 1.93386774 MHz SWT 14 ms Unit dBm V1 [T1] -42.88 dBm 2.47904309 GHz -10	Α
0 dBm 1.93386774 MHz SWT 14 ms Unit dBm 0	Α
0	Α
-10	A
2.47904309 GHz 10 2.47904309 GHz 1.93386774 MHz	A
1.93386774 MHz	
V2 [m1] 27 10 dp-	
-20 V2 [T1] -23.18 dBm	
2.48003507 GHz	
-30	
1MAX	1MA
-40 -D1 -43.18 dBm	
M.	
-50	
-60	
-70	
-80	
-90	
-100	
Center 2.48 GHz 500 kHz/ Span 5 MHz	
Date: 21.MAY.2019 17:23:37	

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Date: 2019-05-27

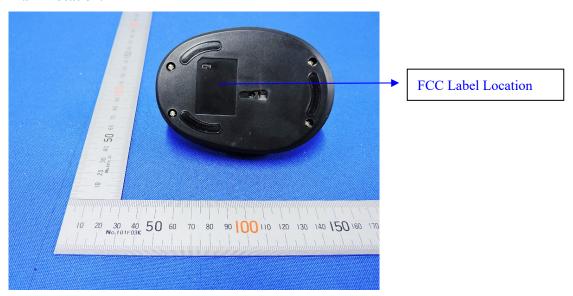


10.0 FCC ID Label

FCC ID: ZJEST-892

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:



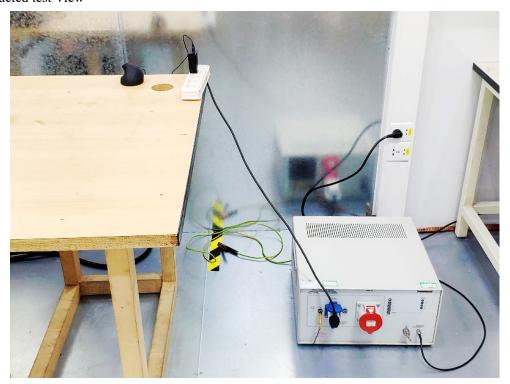
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11.0 Photo of testing

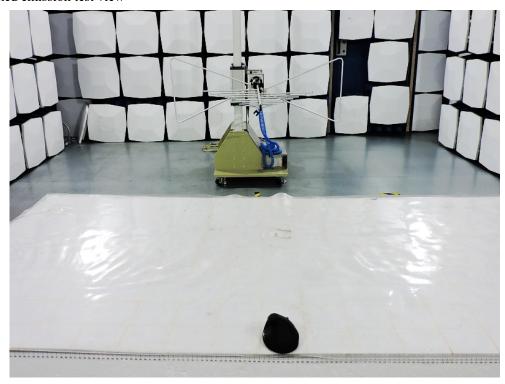
11.1 Conducted test View



Date: 2019-05-27



11.2 Radiated emission test view





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11.3 Photographs – EUT

Outside View-Mouse





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Outside View-Mouse





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Outside View-Mouse





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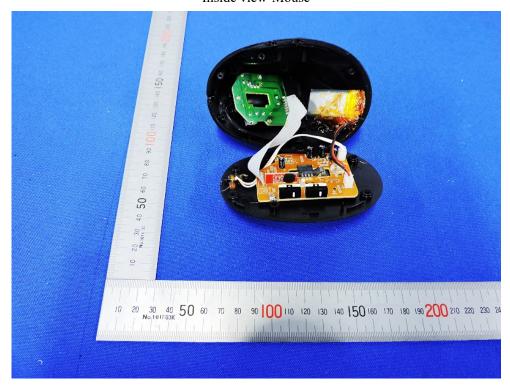
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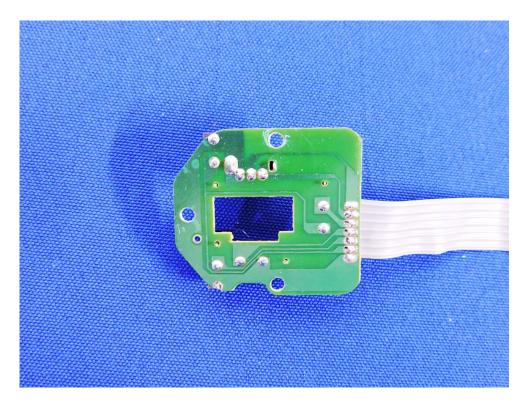
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Inside view-Mouse





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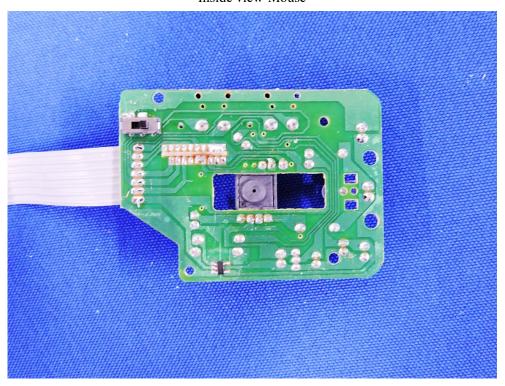
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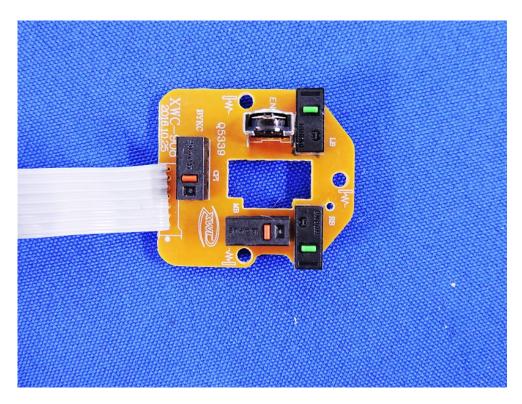
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Inside view-Mouse





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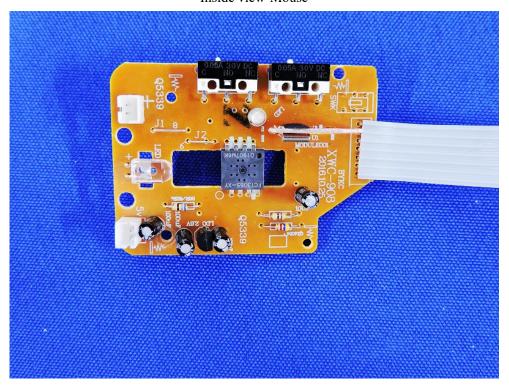
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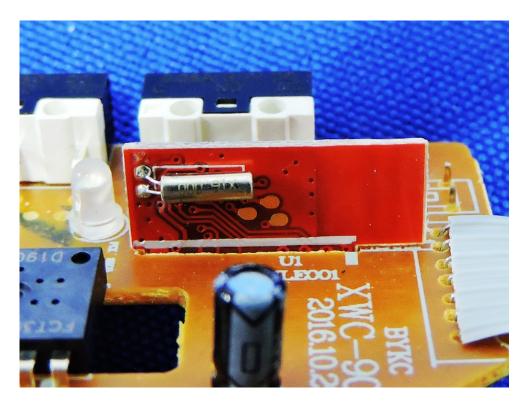
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Inside view-Mouse





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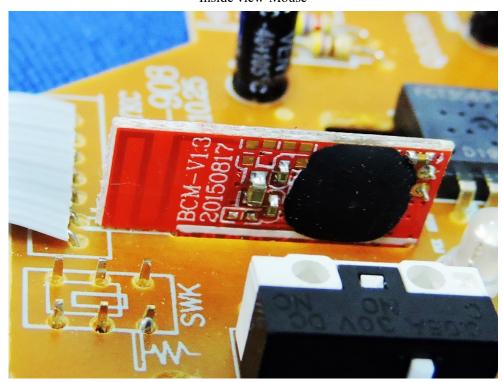
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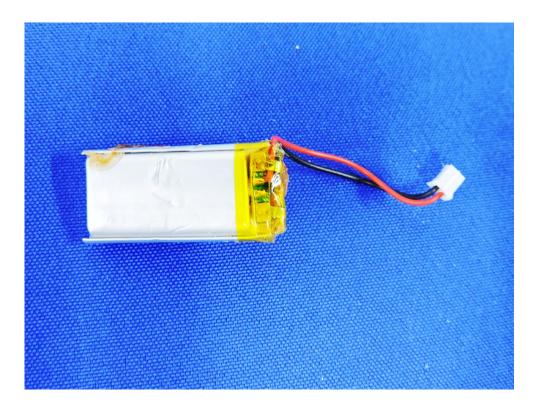
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Inside view-Mouse





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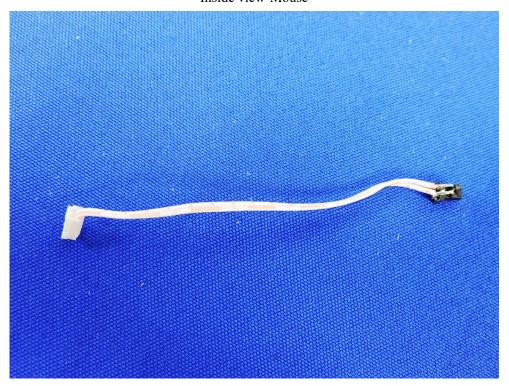
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adopt any other remedies which may be appropriate.

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Inside view-Mouse



-- End of the report--