

Applicant: Dongguan Yuzhenrong Trading Co., Ltd

Product: WIRELESS OPTICAL MOUSE

Model No.: PC365A, T99, DS-2899, PC356B, PC356C

Trademark: N/A

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

Term lang

Terry Tang

Manager

Dated: December 07, 2022

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 17025:2017 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.

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

Date: 2022-12-07



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: Dongguan Yuzhenrong Trading Co., Ltd

Address: Room 204, No.74, Humen Xinlian 9th Street, Humen Village, Humen Town, Dongguan City,

Guangdong

Telephone: --Fax: --

1.3 Description of EUT

Product: WIRELESS OPTICAL MOUSE

Manufacturer: Dongguan Yuzhenrong Trading Co., Ltd

Address: Room 204, No.74, Humen Xinlian 9th Street, Humen Village, Humen Town,

Dongguan City, Guangdong

Trademark: N/A
Model Number: PC365A

Additional Model Name T99, DS-2899, PC356B, PC356C

Rating: DC5V, 1A

Battery DC3.7V, 700mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2405-2475MHz

Channel Number: 16

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

2419, 2475, 2453, 2439

Hardware Version: 2899-B TX V1
Software Version: 171bd45c
Serial No.: 22F11

Antenna Designation PCB antenna with gain -1.66dBi Max (Get from the antenna specification)

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1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2022-11-03 to 2022-12-07

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	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17
LISN	R&S	EZH3-Z5	100253	2022-07-18	2023-07-17
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2022-07-18	2023-07-17
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2022-07-15	2023-07-14
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	2022-07-18	2023-07-17
Power sensor	Anritsu	MA2491A	32263	2022-07-18	2023-07-17
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	2022-07-15	2023-07-14
EMI Test Receiver	RS	ESCS 30	834115/006	2022-07-15	2023-07-14
Spectrum	HP/Agilent	E4407B	MY50441392	2022-07-15	2023-07-14
Spectrum	RS	FSP	1164.4391.38	2022-07-15	2023-07-14
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2022-07-15	2023-07-14
RF Cable	Zhengdi	7m		2022-07-15	2023-07-14
Pre-Amplifier	Schwarebeck	BBV9743	#218	2022-07-15	2023-07-14
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2022-07-15	2023-07-14
LISN	SCHAFFNER	NNB42	00012	2022-08-18	2023-07-17
ESPI Test Receiver	R&S	ESPI 3	100379	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17

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	l according to	o the foll	owing s	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 and RSS-210	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

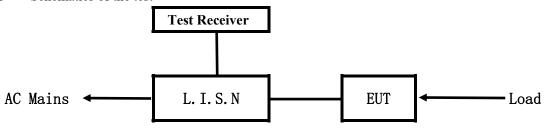
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

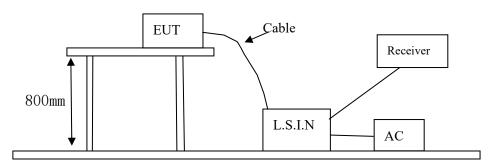


EUT: Equipment Under Test

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.

16 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID
WIRELESS	Dongguan Yuzhenrong	PC365A, T99, DS-2899, PC356B,	2 A 2 H I DC 2 6 5 A
OPTICAL MOUSE	Trading Co., Ltd	PC356C	2A3JH-PC365A

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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

<u> </u>						
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: 2022-12-07



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

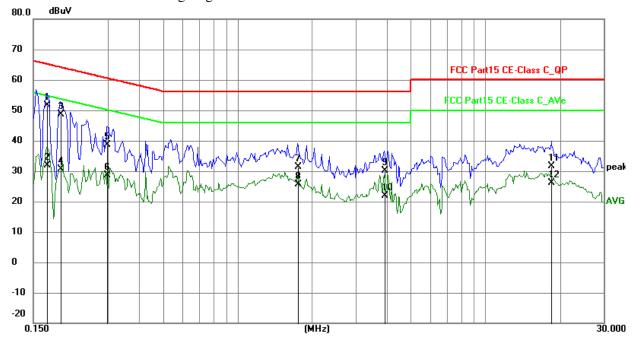
EUT Operating Environment

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	0.1695	41.88	9.77	51.65	64.98	-13.33	QP	Р
2	0.1695	22.15	9.77	31.92	54.98	-23.06	AVG	Р
3	0.1929	39.00	9.75	48.75	63.91	-15.16	QP	Р
4	0.1929	20.87	9.75	30.62	53.91	-23.29	AVG	Р
5	0.2982	28.76	9.76	38.52	60.29	-21.77	QP	Р
6	0.2982	18.93	9.76	28.69	50.29	-21.60	AVG	Р
7	1.7451	21.48	9.80	31.28	56.00	-24.72	QP	Р
8	1.7451	15.94	9.80	25.74	46.00	-20.26	AVG	Р
9	3.9048	20.23	9.88	30.11	56.00	-25.89	QP	Р
10	3.9048	11.99	9.88	21.87	46.00	-24.13	AVG	Р
11	18.4361	21.15	10.59	31.74	60.00	-28.26	QP	Р
12	18.4361	15.49	10.59	26.08	50.00	-23.92	AVG	Р

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

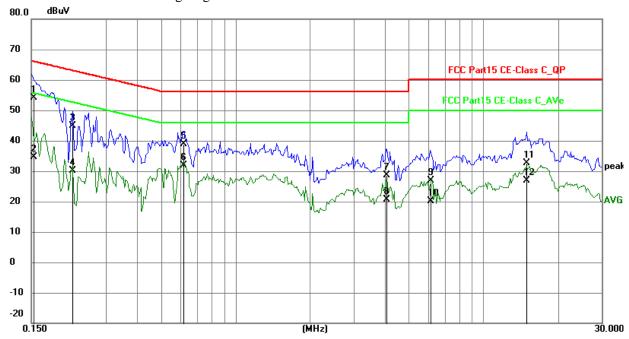
EUT Operating Environment

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	44.46	9.78	54.24	65.79	-11.55	QP	Р
2	0.1539	24.78	9.78	34.56	55.79	-21.23	AVG	Р
3	0.2202	35.15	9.75	44.90	62.81	-17.91	QP	Р
4	0.2202	20.42	9.75	30.17	52.81	-22.64	AVG	Р
5	0.6141	29.19	9.78	38.97	56.00	-17.03	QP	Р
6	0.6141	22.13	9.78	31.91	46.00	-14.09	AVG	Р
7	4.0647	18.62	9.89	28.51	56.00	-27.49	QP	Р
8	4.0647	10.82	9.89	20.71	46.00	-25.29	AVG	Р
9	6.1044	17.01	9.97	26.98	60.00	-33.02	QP	Р
10	6.1044	10.16	9.97	20.13	50.00	-29.87	AVG	Р
11	14.9847	22.15	10.38	32.53	60.00	-27.47	QP	Р
12	14.9847	16.39	10.38	26.77	50.00	-23.23	AVG	Р

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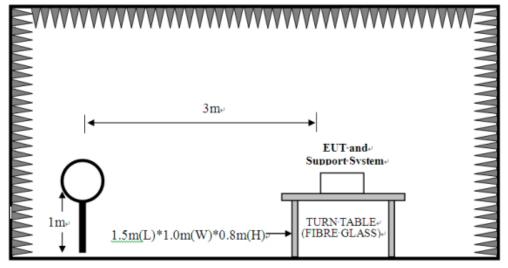


6 Radiated Emission Test

- 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

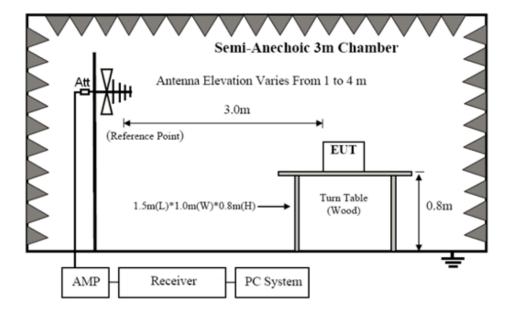
For radiated emissions from 9kHz to 30MHz



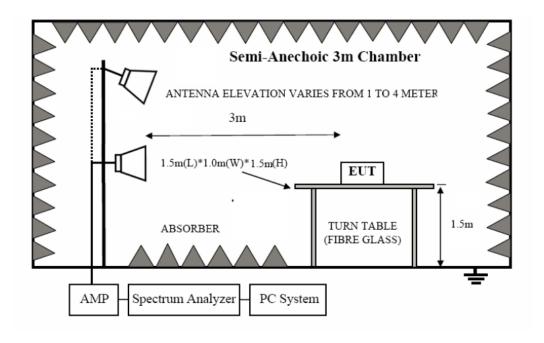
For radiated emissions from 30MHz to1GHz

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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	ngth of Fundame	ntal (3m)	Field Strength of Harmonics (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 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 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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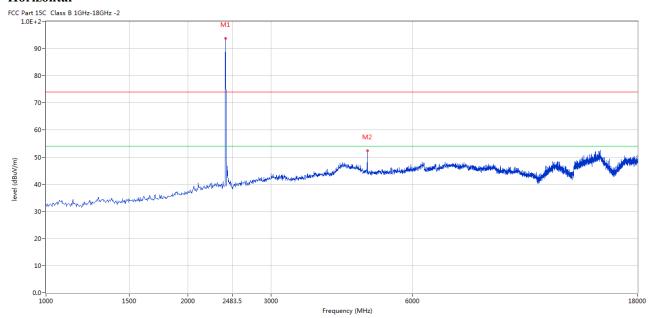


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



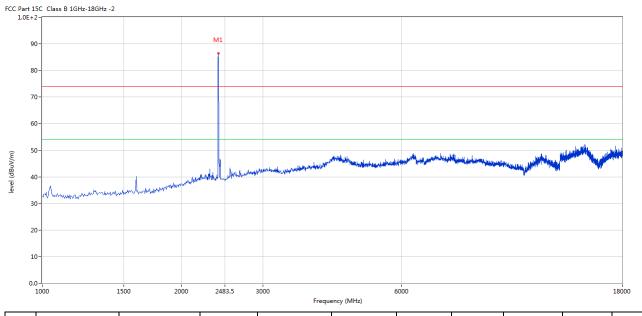
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2405	93.87	-3.57	114.0	-20.13	Peak	224.00	100	Horizontal	Pass
2	4807.048	52.38	3.13	74.0	-21.62	Peak	56.00	100	Horizontal	Pass

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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	86.50	-3.57	114.0	-27.5	Peak	327.00	100	Vertical	Pass

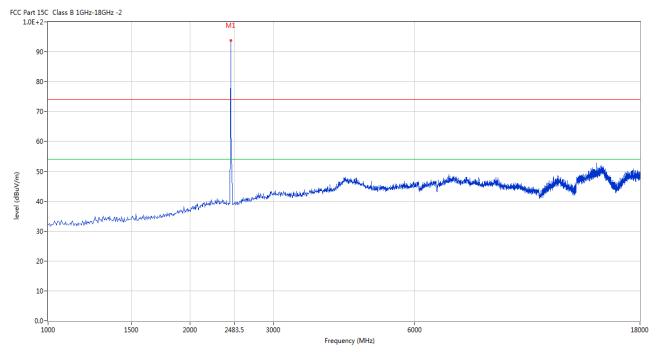
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



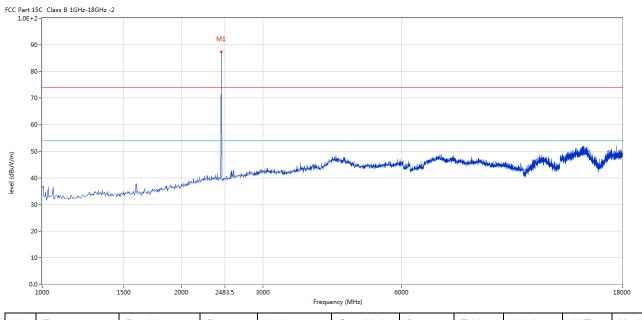
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	93.81	-3.57	114.0	-20.19	Peak	158.00	100	Horizontal	Pass

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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(0)	(cm)		
1	2441	87.33	-3.57	114.0	-26.67	Peak	18.00	100	Vertical	Pass

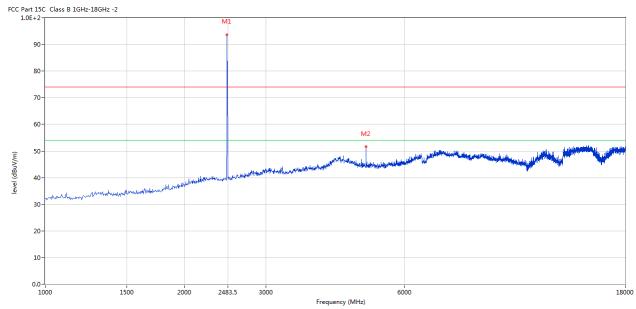
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Please refer to the following test plots for details: High Channel-2475MHz

Horizontal



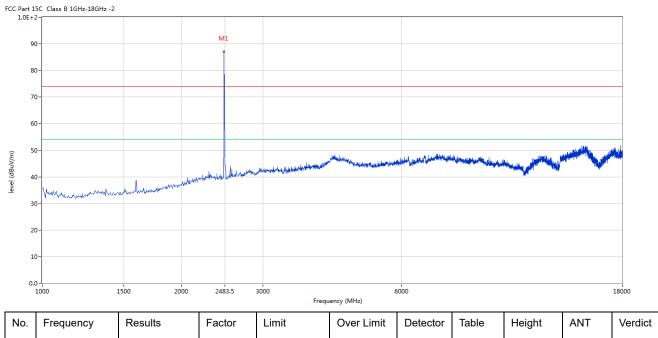
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2475	93.62	-3.57	114.0	-20.38	Peak	121.00	100	Horizontal	Pass
2	4947.263	51.58	3.33	74.0	-22.42	Peak	60.00	100	Horizontal	Pass

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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	87.08	-3.57	114.0	-26.92	Peak	124.00	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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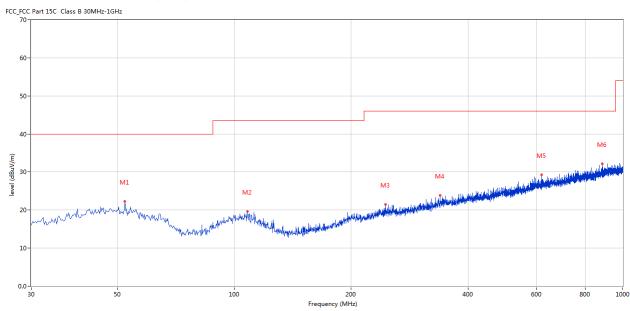


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	52.304	22.23	-11.45	40.0	-17.77	Peak	0.00	100	Horizontal	Pass
2	108.065	19.59	-13.42	43.5	-23.91	Peak	317.00	200	Horizontal	Pass
3	244.801	21.47	-12.23	46.0	-24.53	Peak	66.00	100	Horizontal	Pass
4	338.383	23.88	-9.75	46.0	-22.12	Peak	309.00	100	Horizontal	Pass
5	618.885	29.23	-4.88	46.0	-16.77	Peak	168.00	100	Horizontal	Pass
6	885.811	32.12	-2.04	46.0	-13.88	Peak	250.00	200	Horizontal	Pass

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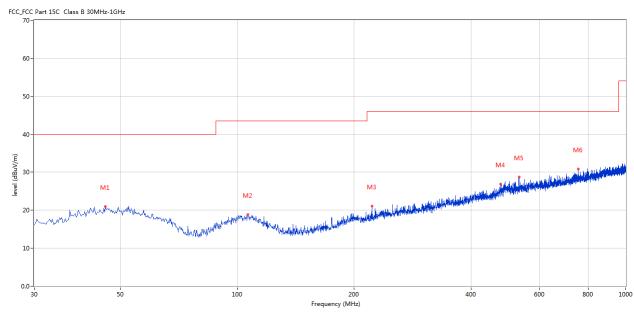


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	45.759	20.95	-11.40	40.0	-19.05	Peak	209.00	200	Vertical	Pass
2	106.368	18.84	-13.34	43.5	-24.66	Peak	360.00	200	Vertical	Pass
3	222.254	21.10	-13.21	46.0	-24.90	Peak	360.00	200	Vertical	Pass
4	476.573	26.90	-7.46	46.0	-19.10	Peak	360.00	200	Vertical	Pass
5	530.880	28.79	-6.46	46.0	-17.21	Peak	360.00	200	Vertical	Pass
6	755.136	30.79	-3.26	46.0	-15.21	Peak	320.00	100	Vertical	Pass

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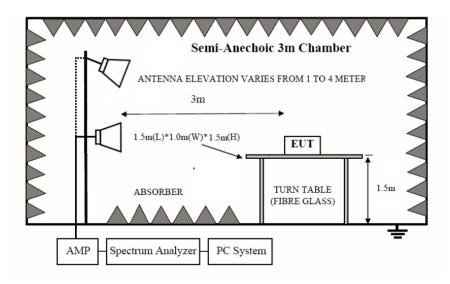


7. Band Edge

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

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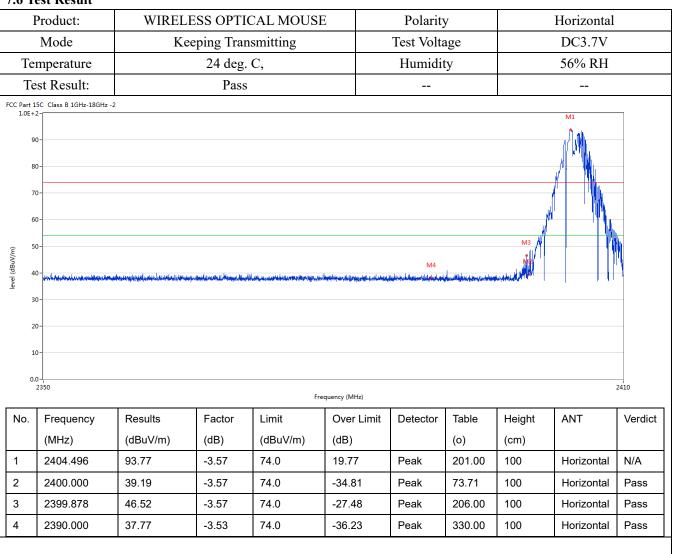
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is the lesser attenuation.

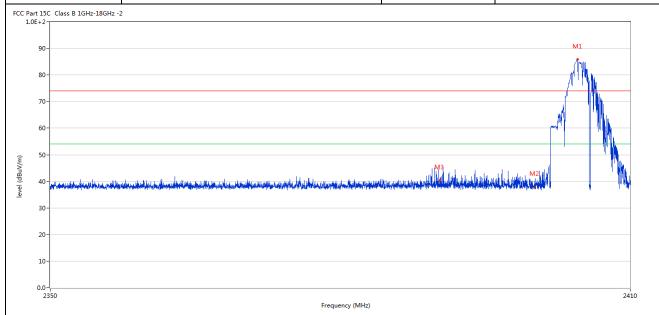
7.6 Test Result



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THE LABORATION OF THE PARTY OF

Product:	WIRELESS OPTICAL 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	2404.496	85.82	-3.57	74.0	11.82	Peak	8.00	100	Vertical	N/A
2	2400.000	38.40	-3.57	74.0	-35.60	Peak	239.86	100	Vertical	Pass
3	2390.000	40.75	-3.53	74.0	-33.25	Peak	204.33	100	Vertical	Pass

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]	Product:	W		OPTICAL 1			Polari	•	Horizo	
	Mode Keeping Transmitting			ing		Test Vol	tage	DC3.	7V	
Te	mperature		2	4 deg. C,			Humid	ity	56% F	RH
Te	est Result:			Pass						
C Part 1	.5C Class B 1GHz-18GHz 2-	-2		M1						
9 8 8 7 6 6 5 5 4	0-		por property of the contract o			M2				
3	eyleydd yddiffereddigen ay digell ddiffer digel	november de del production de la fille	MAN IN II		A MARINA MARINA	Mark properties bear	والعرابة والمرابعة والمتحودة والمتحودة والمتحددة والمتحد	Aphabayra and history republication of the control	ning a did shi manana di katanana di katana da kata	and a specific property of the contract of the
2	0-									
1	0-									
0.	0-									
	2460				Frequency (MHz)	2483.5				2500
No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdi
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2474.496	93.03	-3.57	74.0	19.03	Peak	192.00	100	Horizontal	N/A
				74.0	1				1	

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I	Product:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	VIRELESS	S OPTICAL I	MOUSE		Detecto	or	Vertic	al
Mode Keepii				ng Transmitti	ng		Test Volt	age	DC3.7	'V
Te	mperature		2	24 deg. C,		Humidi	ty	56% RH		
Te	est Result:			Pass						
C Part 1	L5C Class B 1GHz-18GHz 2-	-2								
91	0-			M1						
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36 36 36 20	0	Results		Limit	Over Limit	3.5	Table	Height	The state of the s	

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 -1.66dBi Max. It fulfills the requirement of this section. Test Result: Pass

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Product: WIRELESS OPTICAL MOUSE Test Mode: Keep transmitting	9.0 20dB Bandwidt	th Measurement									
Temperature 24 deg. C, Humidity 56% RH Test Result: Pass Detector PK 20dB Bandwidth 2.174MHz	Product:	WIRELES	VIRELESS OPTICAL MOUSE			Test Mode:		Keep transmitting			
Test Result: 20dB Bandwidth 2.174MHz Ref Lvl Ref Lvl 10 dBm Ref Lvl 10 dBm Ref Lvl 10 dBm Ref Lvl 10 dBm Ref Lvl Ref Lvl 10 dBm Ref Lvl	Mode	Keep	oing Transm	itting		T	est Voltage		DC3	.7V	
20dB Bandwidth	_		24 deg. C,				Humidity		56%	RH	
Marker 1 [T1 ndB] RBW 100 kHz RF Att 20 dB ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.17434870 MHz SWT 5 ms Unit dBm	Test Result: Pass						Detector		Pk	<u> </u>	
Ref Lvl ndB	20dB Bandwidth		2.174MHz								
10 dBm BW 2.17434870 MHz SWT 5 ms Unit dBm 10					R	BW		dz RF Att 20 dF		20 dB	
Tenter 2.405 GHz Tenter 2.405	•									10	
2.4045 401 GHz 2.4045 401 GHz 2.4045 401 GHz 2.000 dB 3		BW	2.174348	70 MHz	S	WT	5 m	s Ui	nit 	dBm	1 n
2.4045 401 GHz 20.00 dB BW 2.17434870 MHz -23.91 dBr 2.40390 281 GHz -23.01 dBr -20.1MAX -30.20 1MAX -							v ₁	[T1]	-2	.96 dBm	A
21.00 MB 2.1743870 MH2 2.40390281 GHz -20 1MAX -30 -40 -50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	0										
-10 -20 -20 -20 -20 -40 -40 -50 -60 -70 -70 -80 -90 Center 2.405 GHz -20, 9) dBn 2.40390281 GHz 2.40607715 GHz 1MA -22, 9) dBn 2.40390281 GHz 2.40607715 GHz 1MA -23, 01 dBn 2.40607715 GHz 1MA -24, 0390281 GHz 2.40607715 GHz 1MA -25, 01 dBn 2.40607715 GHz 1MA -26, 9) dBn 2.40390281 GHz -26, 01 dBn 2.40607715 GHz 1MA -30 -40 -50 -50 -50 -50 -50 -50 -50 -50 -50 -5											
2.4039 C81 GHz -20 1MAX -30 2.4060 7/15 GHz 1MA -30 -40 -50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	1.0			Land Market	\ ~	/	/N I	[T1]	-22		
2.40607715 GHz 1MAX -30 -40 -50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	-10			*		V			2.40390		
1MAX -30 -40 -50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz							\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	P [T1]	-23	.01 dBm	
-30 -40 -50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz		7	7					¥2	2.40607	715 GHz	1MA
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-50 -60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	<u></u>	/							Maria		
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-60 -70 -80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	Monor									Why.	
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-80 -90 Center 2.405 GHz 500 kHz/ Span 5 MHz	-60										
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Center 2.405 GHz 500 kHz/ Span 5 MHz	-80										
Center 2.405 GHz 500 kHz/ Span 5 MHz											
	-90										
Date: 18.NOV.2022 09:31:29	Center 2.405 GHz 500 kHz/ Span 5 MHz										
	Date: 18	.NOV.2022 0	9:31:29								

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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 2.184MHZ Ref Lv1 ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.18436874 MHz SWT 5 ms Unit dBm 10	Product:	WIRELESS	OPTICAL MOUSE	Test Mode	: Keep tr	ansmitting
Test Result: 20dB Bandwidth 2.184MHz Marker 1 [T1 ndB]	Mode	Keeping	g Transmitting	Test Voltage	e DO	C3.7V
20dB Bandwidth 2.184MHz	Temperature	24	4 deg. C,	Humidity	569	% RH
Marker 1 [T1 ndB] RBW 100 kHz RF Att 20 dB	Test Result:		Pass	Detector		PK
Ref Lvl ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.18436874 MHz SWT 5 ms Unit dBm V1 [T1]	20dB Bandwidth	2.	184MHz			
10 dBm BW 2.18436874 MHz SWT 5 ms Unit dBm 10	Ref Lvl					20 dB
TITE C.82 dBn 2.44099499 GHz 2.44099499 GHz 2.18436874 MHz 2.43994281 GHz 2.43994281 GHz 2.44208717 GHz 1MAX -30 -50 -60 -70	•					dBm
2.43990281 GHz -15.43 dBm -15.43 dBm -15.40 -160 -70				ndl	2.44099	A 9499 GHz
-30 -40 -50 -60 -70		T1		\bigvee_{T}	2.43990	0281 GHz
-40 -50 -60 -70	1MAX				2.44208	. — . — — —
-70	4/20/20/10/10	Mary W			have	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
-70	-50					W
	-60					
-80	-70					
	-80					
Date: 18.NOV.2022 09:42:12	Center 2			kHz/	Spa	an 5 MHz

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Product:	WIRELESS OPTICAL	MOUSE	Test Mode:	Keep tra	ansmitting
Mode	Keeping Transmit	ting	Test Voltage		3.7V
Temperature	24 deg. C,		Humidity	56%	% RH
Test Result:	Pass		Detector]	PK
20dB Bandwidth	2.174MHz				
	Marker 1 [T1 n	dB] F	RBW 100 ki	Hz RF Att	20 dB
Ref Lvl 10 dBm	ndB 20. BW 2.174348		7BW 300 ki		dBm
10 (18)	BW 2.174340	70 MHZ S		S OHIC	UBIII
		,	V 1	[T1] 2.47450	.14 dBm 401 GHz
0	 		ndB	2.17136	0.00 dB
	<i></i>		BW	2.17434	870 MHz
-10			V _{T1}	[T1] -17	1.76 dBm
	TI		$\nabla_{\mathbf{T}_2}$	2.47389 7[T1] -17	279 GHz .92 dBm
-20	 			2.47606	713 GHz
1MAX					1MA
-30	dy M			Wayner be	
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-50					
-60					
-70					
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-90		500 kHz/			
Center 2.475 Date: 18.NOV	Spa	n 5 MHz			

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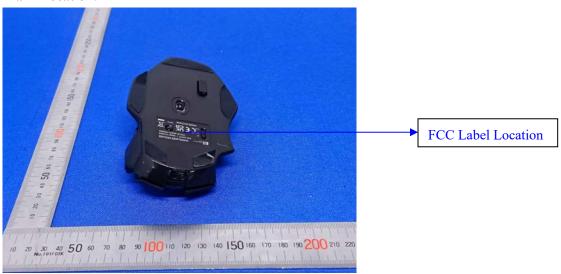


10.0 FCC ID Label

FCC ID: 2A3JH-PC365A

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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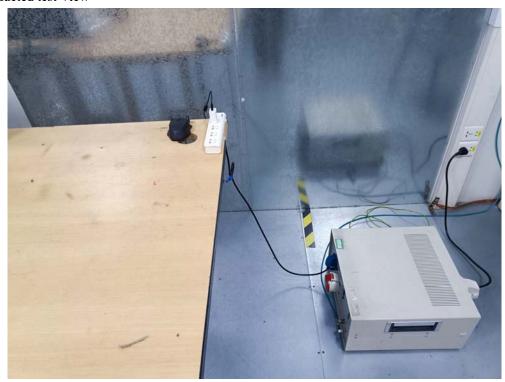
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11.0 Photo of testing

11.1 Conducted test View--



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Radiated emission test view



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11.2 Photographs – EUT



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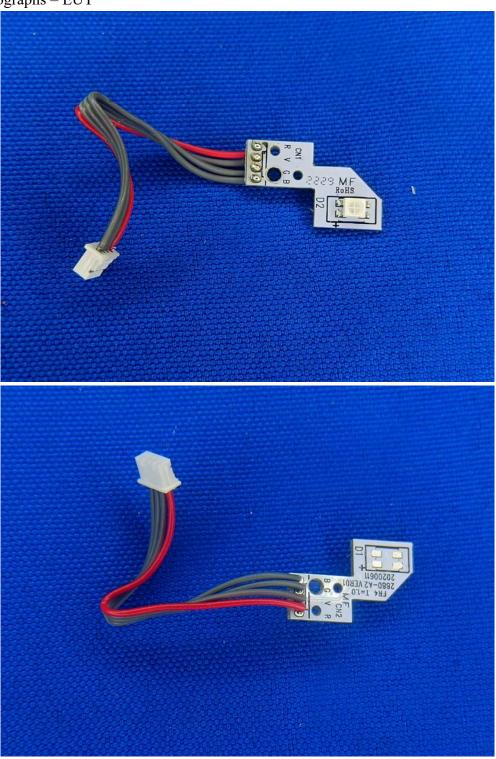
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adopt any other remedies which may be appropriate.

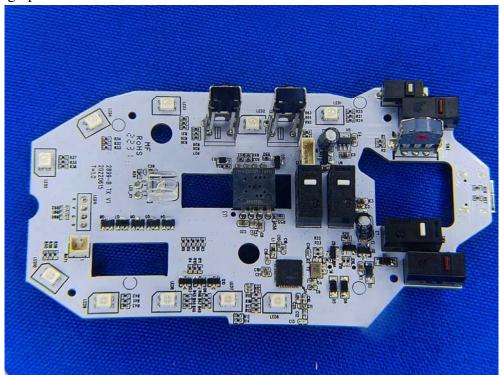
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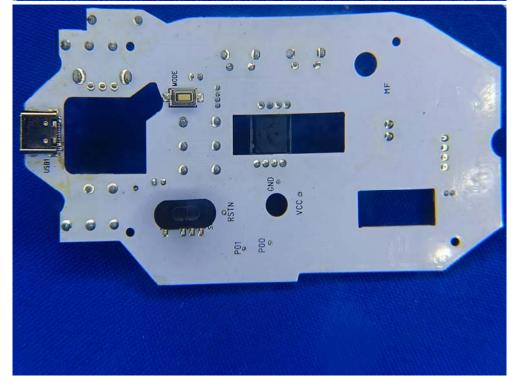
Report No.: TW2211023-01E

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Photographs – EUT





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

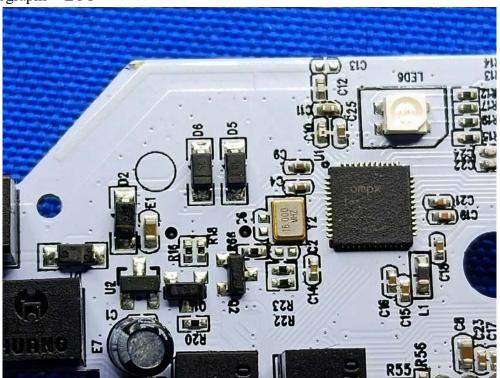
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Photographs – EUT



-End of the Report--