



Report No.: TW2010112E File Reference No.: 2020-10-26

Applicant: Dongguan IMLONG Electronic Co., Ltd.

Product: Wireless Mouse

Model No.: YL-WM1807,7142-49

Brand Name: 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 C63.4&FCC Part 15 Subpart

C, Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

Jack Chung

Jack Chung

Manager

Dated: October 26, 2020

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.

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

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

11.0

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Photo of Test Setup and EUT View.

Date: 2020-10-26



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 IMLONG Electronic Co., Ltd.

Address: Huixiang Road5, Jinglian Community, Qiaotou Town, Dongguan City, China

Telephone: -Fax: --

1.3 Description of EUT

Product: Wireless Mouse

Manufacturer: Dongguan IMLONG Electronic Co., Ltd.

Address: Huixiang Road5, Jinglian Community, Qiaotou Town, Dongguan City, China

Brand Name: N/A

Model Number: YL-WM1807

Additional Model Name 7142-49

Input Voltage: DC1.5V, 1 pcs AA battery

Modulation Type: GFSK

Operation Frequency 2405-2475MHz

2405 2408 2411 2414 2417 2454 Channel List: 2448 2451 (Unit: MHz) 2457 2460 2463 2466 2469 2472 2475

Software Version: W1807-SMD Hardware Version: V2.2-MX8650

Antenna Designation PCB antenna with gain -1.0dBi Max (Declared by the applicant)

1.4 Submitted Sample

1 Sample

1.5 Test Duration

2020-10-21 to 2020-10-26

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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

Terry Tang

The sample tested by

Print Name: Terry Tang

Date: 2020-10-26



2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2020-06-23	2021-06-22
LISN	R&S	EZH3-Z5	100294	2020-06-23	2021-06-22
LISN	R&S	EZH3-Z5	100253	2020-06-23	2021-06-22
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2020-06-23	2021-06-22
Loop Antenna	EMCO	6507	00078608	2018-06-25	2021-06-24
Spectrum	R&S	FSIQ26	100292	2020-06-23	2021-06-22
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2020-06-23	2021-06-22
Horn Antenna	R&S	BBHA 9120D	9120D-631	2018-07-09	2021-07-08
Power meter	Anritsu	ML2487A	6K00003613	2020-06-23	2021-06-22
Power sensor	Anritsu	MA2491A	32263	2020-06-23	2021-06-22
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2018-07-04	2021-07-03
9*6*6 Anechoic			N/A	2018-02-07	2021-02-06
EMI Test Receiver	RS	ESVB	826156/011	2020-06-23	2021-06-22
EMI Test Receiver	RS	ESH3	860904/006	2020-06-23	2021-06-22
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2020-06-23	2021-06-22
Spectrum	HP/Agilent	E4407B	MY50441392	2020-06-23	2021-06-22
Spectrum	RS	FSP	1164.4391.38	2020-01-16	2021-01-15
RF Cable	Zhengdi	ZT26-NJ-NJ-8		2020-06-23	2021-06-22
Ki Cabic	Zileligui	M/FA		2020-00-23	2021-00-22
RF Cable	Zhengdi	7m		2020-06-23	2021-06-22
RF Switch	EM	EMSW18	060391	2020-06-23	2021-06-22
Pre-Amplifier	Schwarebeck	BBV9743	#218	2020-06-23	2021-06-22
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2020-06-23	2021-06-22
LISN	SCHAFFNER	NNB42	00012	2020-01-07	2021-01-06

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	V18.06	
Frequency		

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3.0 Technical Details

3.1 Summary of test results

The EUT has been tested according to the following specification	tested according to the following specific	ations:
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Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.207	Conducted Emission Test	N/A	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

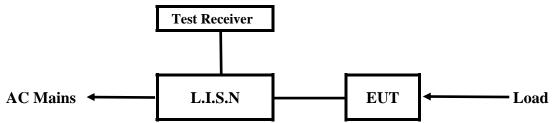
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

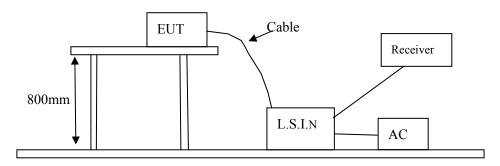


EUT: Equipment Under Test

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.

One channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID
Wireless Mouse	Dongguan IMLONG	YL-WM1807,7142-49	2AH9Y-YL-WM1807
Wifeless Mouse	Electronic Co., Ltd.	1 L- W W11007, / 142-49	2A1191-1 L-WW1007

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B. Internal Device

Device	Manufacturer	Model	FCC ID/SDOC
N/A			

C. Peripherals

Device	Manufacturer	Model	Rating
N/A			

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

Eraguanay(MHz)	Limits (dBµV)		
Frequency(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: N/A

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

Note: EUT powered by AA battery, this test item not applicable.

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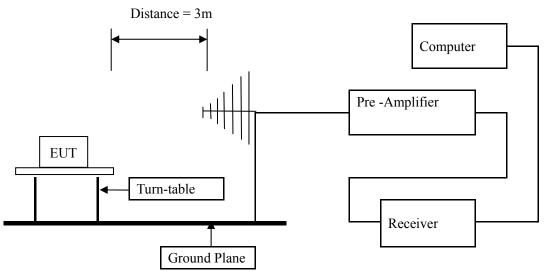
Date: 2020-10-26



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. 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	rength of Fundamental (3m)		Field Strength of Harmonics (3m)		nics (3m)
(MHz)	mV/m	dBuV/m		uV/m	dBu	V/m
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)

Note:

- 1. RF Field Strength (dBuV) = 20 log RF 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 (dBμV/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 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 below 30MHz, it was the floor noise.
- 6. New battery was used during tests.
- (7) X,Y,Z are all have been tested, only worse case is reported

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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:	DC1.5V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)
2405	88.89 (PK)	Н	114/94	-5.11
2405	81.92 (PK)	V	114/94	-12.08
4810	48.63 (PK)	Н	74/54	-5.37
4810	50.13 (PK)	V	74/54	-3.87
7215		H/V	74/54	
9620		H/V	74/54	
12025		H/V	74/54	
14430		H/V	74/54	
16835		H/V	74/54	
19240		H/V	74/54	
21645		H/V	74/54	
24050		H/V	74/54	

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

- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss Pre-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
- (6) The PK emission level less than the AV limit. No necessary to record the AV emission level.

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Product:	Wireless Mouse	Test Mode:	Keep transmitting-Middle Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25℃
	Data		
Test Voltage:	DC1.5V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)
2451	92.37(PK)	Н	114/94	-1.63
2451	81.45(PK)	V	114/94	-12.55
4902	49.50(PK)	Н	74/54	-4.50
4902	51.86(PK)	V	74/54	-2.14
7353		H/V	74/54	
9804		H/V	74/54	
12255		H/V	74/54	
14706		H/V	74/54	
17157		H/V	74/54	
19608		H/V	74/54	
22059		H/V	74/54	
24510		H/V	74/54	

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

- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss Pre-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
- (6) The PK emission level less than the AV limit. No necessary to record the AV emission level.

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Product:	Wireless Mouse	Test Mode:	Keep transmitting-High Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25℃
	Data		
Test Voltage:	DC1.5V	Humidity:	56%
Test Result:	Pass		

Frequency	Emission PK/AV	Horiz /	Limits PK/AV	Margin
(MHz)	(dBuV/m)	Vert	(dBuV/m)	(dB)
2475	92.94 (PK)	Н	114/94	-1.06
2475	80.33 (PK)	V	114/94	-13.67
4950	47.71 (PK)	Н	74/54	-6.29
4950	49.04 (PK)	V	74/54	-4.96
7425		Н	74/54	
7425		V	74/54	
9900		H/V	74/54	
12375		H/V	74/54	
14850		H/V	74/54	
17325		H/V	74/54	
19800		H/V	74/54	
22275		H/V	74/54	
27225		H/V	74/54	

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

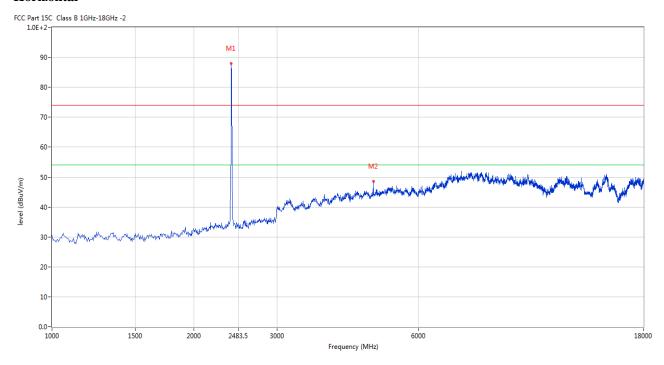
- (2) Emission Level = Reading Level + Antenna Factor + Cable Loss Pre-Amplifier
- (3)Margin=Emission-Limits
- (4)According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting
- (6) The PK emission level less than the AV limit. No necessary to record the AV emission level.

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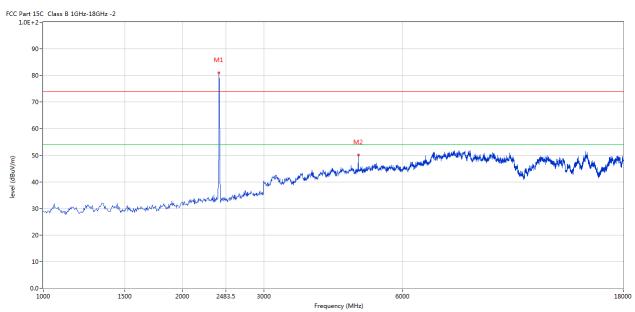


Please refer to the following test plots for details: Low Channel

Horizontal



Vertical



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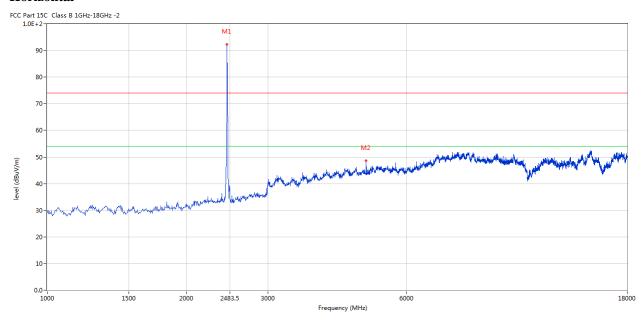
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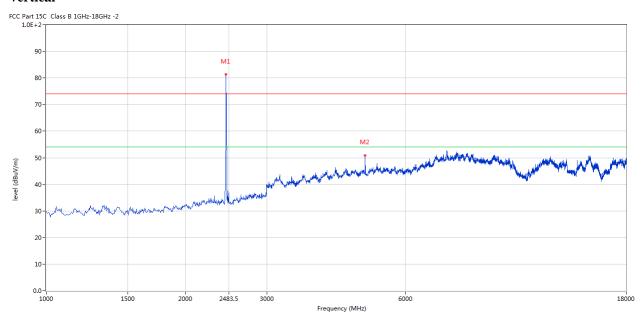


Please refer to the following test plots for details: Middle Channel

Horizontal



Vertical



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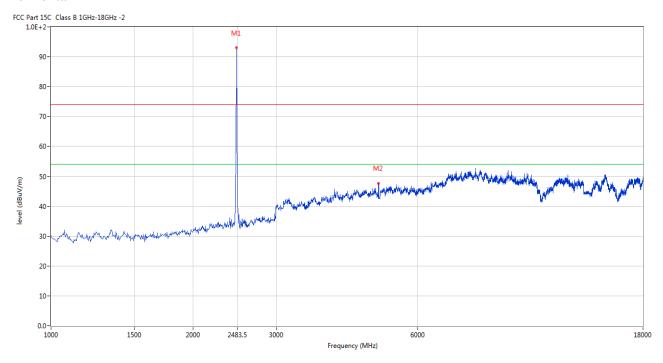
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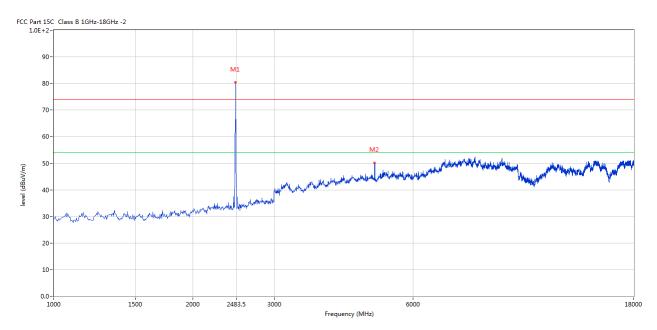


Please refer to the following test plots for details: High Channel

Horizontal



Vertical



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

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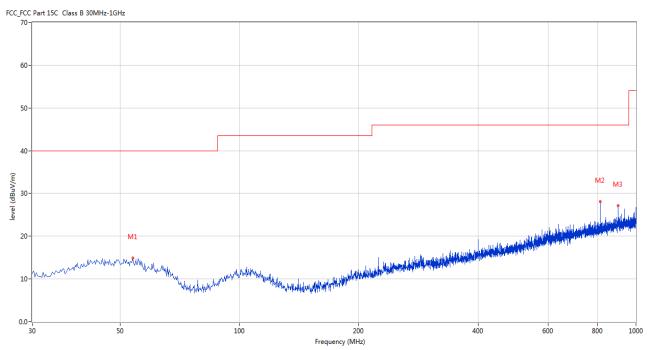


3. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	53.759	14.91	-11.53	40.0	-25.09	Peak	238.00	100	Horizontal	Pass
2	812.594	28.03	-2.94	46.0	-17.97	Peak	211.00	100	Horizontal	Pass
3	900.357	27.17	-1.88	46.0	-18.83	Peak	184.00	100	Horizontal	Pass

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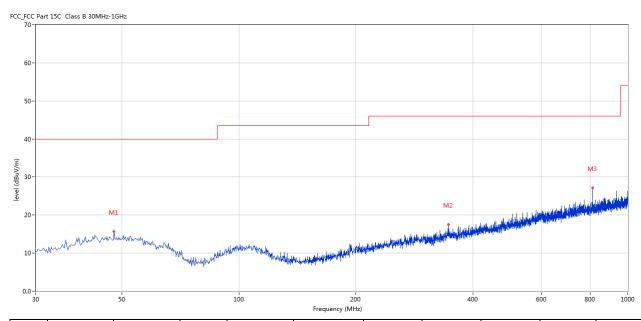


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	47.698	15.65	-11.34	40.0	-24.35	Peak	49.00	100	Vertical	Pass
2	345.414	17.48	-9.50	46.0	-28.52	Peak	294.00	100	Vertical	Pass
3	812.594	27.11	-2.94	46.0	-18.89	Peak	59.00	100	Vertical	Pass

Date: 2020-10-26

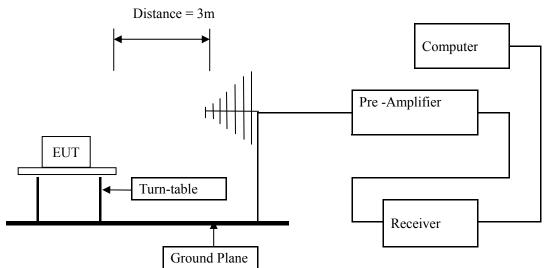


7. Band Edge

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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7.6 Test Result

P	roduct:		Wire	eless Mouse		Pola	arity]	Horizontal	
	Mode		Keepin	g Transmitti	ng	Test V	oltage		DC1.5V	
Ten	nperature		24	4 deg. C,		Hum	nidity		56% RH	
Tes	st Result:			Pass		-	-			
C Part 150	C Class B 1GHz-18GHz	-2								
90-									M1	
									\sim	
80-										
70-									\rightarrow	
60-								M2		$\overline{}$
50-								- January Market		
50-							МЗ	and the state of t		
40-	his delay to policy beach a subject to a local sound with	hranana da salum yalayoyada riba sina sesa i zurla	مندما بالمراجع بالمراجع المراجع	namentalism is state in the interesting in the second	, in his principal and principal pri	المعتبط فليوض بيعت وعث كالحاصر	M3	and the second s		
40- 30-		here was he who who was the same the sa	rescendados por de formido de el	namediata i spir i filipi in activida secun	ىدىلىدىدىدىدىدىدىدىدىدىدىدىدىدىدىدىدىدى	فاستعاده والمستعادة وا	M3	And Control of the Co		
40-		horastalasierilasyeenskape ee kah	oran de la graph d	namagaine agu i fab in aisinis acan	philosophy and philosophy and a	والمعارض والمتعارض والمتعا	M3 Saltrakgainskraultskraukraukraukraukraukraukraukraukraukrau	The Control of the Co		
40- 30-		orano da de esta de la composición del composición de la composici	الله في المادية المادي	on, maginisas ti alph i dalip in california assum	, in the plant was a first of the second	المعتبان الم	M3 hydrodyninderaeldodoconiaeth	The Control of the Co		
30- 20- 10-	kinding terpelan kinding appelantisised anal sele	h-Marie da alampida yang seri sebagi seri da alampida seri da alampida seri da alampida seri da alampida seri d	n de la descripción de la descripción de la descripción de la dela del	namengipi san dalah dalah kensisi bilan salah	Julippinia andre et un periodo periodo de la constante et un perio	المعتبرة فالمعتبر بالمعتبرة والمعتبرة والمعتبر	M3 Radionalgramadasaharan	The Control of the Co		2410
30- 20- 10-	kindeling to the American spinetis in the conductive spinetis spinetis in the conductive spinetis in the conductive spinetis spinetis in the conductive spinetis spin	hrendeskalariere skuppen skuppe met indi	الله المادار ا	necessia de la delectrica de la constitución de la constitución de la constitución de la constitución de la co	Frequency (MH		M3 hadendagenindereddishorminger	The second secon		2410
30- 20- 10-	kinding terpelan kinding appelantisised anal sele	Results	Factor	Limit			M3 Modern de la	Height	ANT	ı
30- 20- 10- 23-	haddanske hada anakalida ad A				Frequency (MH	z)			ANT	2410 Verdic
30- 20- 10- 23-	Frequency	Results	Factor	Limit	Frequency (MH	z)		Height	ANT Horizontal	ı
30- 20- 10- 20- 2:	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Frequency (MH Over Limit (dB)	^{z)} Detector	Table (o)	Height (cm)		Verdic

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P	Product:		Wire	eless Mouse		Detect	or		Vertical	
	Mode		Keeping	g Transmitti	ing	Test Vol	tage		DC1.5V	
Ten	nperature		24	4 deg. C,		Humid	ity		56% RH	
Tes	st Result:			Pass						
Part 15	6C Class B 1GHz-18GHz	-2								
90-	1-									
80	1-								M1	
70	1									
60									_/	
50								M	2	
							M3	M makestratikishing	²	
50	i – iran, hadi kantul dana masaki kadi fadi fabusa kita, dita,	Makapanga di katalika kabika karakira	<u>؞ٷڔٷؠؠٷڿۺٷڴ</u> ڰٷؠؠۅۼؙ	والمستعمل والمست	nzik, ido-Afrikanskijskoluksonovopulusje i	والمعادية	M3	M.	3	
50·		itterkepten, je di _{na} nasio, sakio, saekog	ન્યુંલ જીવન કે હતા. કે ને કે કે કે કે કે કે કે કે ક	بسيناهيناه بملوط بالحضيط المتعاقبي	ncilo,idd o ddiwediaidd o branni y godingi d	takun setukutus helitakotas	M3	M	2,	
50· 40· 30·		ittelespena _s pend _{erste} nssylverisches auch eine	nin izmann filiklir izmen	vançıktırik,siqe,i,ski saskindinu	માર્ગિક,મંદ્રોન ન નિર્દેશભાગમાં સુંદેશની કર્મ જાતના કે કૃક્ત ની નામું સ્ટે	والمراجع والمراجع المراجع المر	M3	M.	2,	
50· 40· 30· 20· 10·	- prop. history him near he dispelled and the Men	Managara, en de quiente, sentre, sentre, sentre, se	سفد يوسه عدر المنظرة بدؤ مدر الم	والمستوانة والمراجع فيار والمراجعة المتعاقب والمراجعة المتعاقب والمراجعة المتعاقب والمراجعة المتعاقب والمراجعة	nith, vide a different right fair the east of the eight	edunise ducin s dei nicen	M3	M Maring Maring	2,	
50· 40· 30· 20· 10·	- Maria delicione del marche de pubblica del mellon	itt allegetes, et discussion voi so, mer hoir.	nder til med som frikklik stillen er de	نصريناوندالاردادهار مان مان منافاندالاد <mark>.</mark>	Frequency (MF	takunjatulaitu, ilili interag	M3 Hadinin addusin Addis	M.	2,	2410
50· 40· 30· 20· 10· 0.0· 2	- prop. history him near he dispelled and the Men	Results	Factor	Limit		Detector	M3 Table (o)	M. M. Market Mar	ANT	2410 Verdict
50· 40· 30· 20· 10· 0.0· 2	manufacture and a state of the	Results (dBuV/m)			Frequency (MF	1	Handling and an inches his hand	ne et et en		
50· 40· 30· 20· 10·	Frequency		Factor	Limit	Frequency (MF	1	Handling and an inches his hand	Height		

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]	Product:		Wire	less Mouse		Polar	ity	I	Horizontal	
	Mode		Keeping	g Transmitti	ng	Test Vo	ltage		DC1.5V	
Те	mperature		24	deg. C,		Humio	dity		56% RH	
Те	est Result:			Pass						
FCC Part 1	.5C Class B 1GHz-18GHz 2-r	-2								
9				\bigwedge						
7	0-			/						
6	0-									
(m//\ng	0-	المرسوانية المستوانية المستوانية المستوانية المستوانية	, 100 A.P.		200	Sandan Sandan				
o 4 (m//ngp)	O-						- Theredolegen my mande	一大大学 というない とうかいかい できょうかん かんしゅうかん	mandari koguna meniskihi medinda bibikihi	ر ا در در المادان
3	0-								- Villeger	
2	0-									
1	0-									
	0-									
	2460				Frequency (MF	2483.5 (z)				2500
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
		(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		l
	(MHz)	(ubu v/III)	(GD)	(4241,)	(- /			` '		

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1	Product:		Wire	less Mouse		Detect	tor		Vertical			
	Mode		Keeping	g Transmitti	ng	Test Vol	tage	DC1.5V				
Te	mperature		24	l deg. C,		Humid	lity		56% RH			
Te	est Result:			Pass								
CC Part 1	15C Class B 1GHz-18GHz	-2										
90												
91	90-											
80	30-			\sim								
7/	70-											
60	50-				$\overline{}$							
_ 5	50-				$\overline{}$							
Ε			Mark Control		Mark Control							
(m//mgp) = 44	10-	d and a trade of the little with the little of the little	Marine Comments		The same of the sa	Marian garage						
m//uBb) level	international polynophydia polynopol	olynostationi/griphistic reachiging bear	Marine Commission			white days a desired to the production of	orași lateranțe as stanța de propins	ساددنارهين كالمسابخ لامتد يعين المشار	بنياية المعروفيس المعرفية وموس	their national adversion in the second		
E/(ngp) level (dβn/) 30	girl and high half and half the desired as seen	olyte (dalitar) pri historia in menis de si dalit	محمد مستمر مستواد		The same of the sa	makerishan ayarida da dayar da da gapi	raylates dags lags lags by	عاديد أو ينهيز والموسوع الموادية والمعارض الموادية والموادية والموادية والموادية والموادية والموادية والموادية	المنافية المتعارضة والمتعارضة والمتعارض والمتعارضة والمتعارضة والمتعارضة والمتعارضة والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض و	erekranianikelarikan kap		
m//uBb) level	girl and high half and half the desired as seen	night of the first of the state	adea and a second			المراجعة والمراجعة والمراج	mad herodesir daga Umrita	Airkaine initipudes pakaliseu	ar garaga ay	topo _{sk} olonkolonk _e govlog		
level (dBuV/m		ika gaarat galiinkii waanigawa ka	and the second			Makini den kanada k	malikendasi daga benjis	Astronomy i demonstrative de serve	atomposit Arabigandiki mapalahyanda daliku ta	114 stadesk david og skap		
E/Angg/ 44 30 20	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	المراجع والمراجع والم	and the second s				majhandaandaan banin	Arthure in Leveler, week in some	alomposit positis a separat promise talifa in			
E/Angg/ 44 30 20	10-	dengangangangangangangangangangangangangan	Anna de la companya d		Frequency (MH	2483.5	majhetunekee, tanga lampiya	Astronomy aprilyments year to a rea	airmywalfwalfyraddio agaidyynaddio laffi (a	2500		
اور (Bay) اور (Bay) عرا عرا عرا عرا عرا عرا عرا عرا عرا عرا	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Results	Factor	Limit		2483.5	Table (o)	Height	ANT			
Ε//ngp) 44/ 34 24 10	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		Factor (dB)	Limit (dBuV/m)	Frequency (MH	2483.5 z)				2500		

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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 -1.0dBi Max. It fulfills the requirement of this section. Test Result: Pass

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Product:	ise		Te	est Mode:		Keep tran	nsmitting			
Mode	Keepi	ng Transm	itting		Te	st Voltage		DC1	.5V	
Temperature	,	24 deg. C,			Н	Iumidity		56% RH		
Test Result:	Pass				I	Detector	PK			
dB Bandwidth	۷	20.84kHz							-	
>	Marker	1 [T1 n	ndB]	RI	ВW	30 k	Hz R	F Att	10 dB	
Ref Lvl	ndB	20.	00 dB	VE	ВW	100 k	Hz			
0 dBm	BW 420	.841683	37 kHz	SV	TV	6 m	s U	nit	dBm	ı
0						v ₁	[T1]	-20	0.25 dBm	
1.0								2.40500	601 GHz	
-10						ndE	3	20	0.00 dB	
						BW ⊽⊤1	4 [T1]	20.84168	337 kHz 2.79 dBm	
-20				5				2.40474	950 GHz	
				4		$ abla_{\mathrm{T}2}$	2 [T1]		9.88 dBm	
-30				1				2.40517	034 GHz	
1MAX -40		T.J	V	\	T2					1:
		البر				ı				
-50		, V			V					
60	and h	_M				Mary	None,	min		
-70 Junnhalm	MAN WALL						W.	mulny	www.	
-80										
90										
Center 2.40	F CII-		200	kHz/				G-	an 2 MHz	

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Product:	Wireless Mouse				-	Гest Mode:		Keep transmitting			
Mode	Keeping Transmitting				Т	Test Voltage		DC1.5V			
Temperature	24 deg. C,				Humidity		56% RH				
Test Result:	Pass				Detector		PK				
20dB Bandwidth	th 320.64kHz										
Ŕ	Marker 1 [T1 ndB]			RBW	W 30 kHz RF Att			10 dB			
Ref Lvl		ndB	20.	00 dB	VBW	100 k	Hz				
0 dBm	BW 320.64128257 kHz			SWT	6 m	ıs Uı	Unit			ı	
0						v ₁	[T1]	-19	.19	dBm	
								2.45098	597	GHz	Α
-10						ndI	3	20	.00	dВ	
				1		BW	32	0.64128	257	kHz	
-20						$\nabla_{\mathbf{T}}$	[T1]	-39	.63	dBm	
					4	_		2.45079		GHz	
-30				N M	١	V _T :	2 [T1]	-38	.20		
1MAX			₩ ₩	/	72 7			2.45111	122	GHz	1MA
- 40			الر								
-60					hy						
	^	muh	ار			Munu	velley	Λ			
-80 -80	4,000						₩ ,	handle handle	wh	J	
-90											
-100 Center 2.	45102	7074 GE	z	200	kHz/	<u> </u>	l	Sno	n 2	MHz	<u> </u>
Date: 21				200	,			Spo			

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Product:	Wireless Mouse			Т	Test Mode:		Keep transmitting			
Mode				Те	est Voltage		DC1.5V			
Temperature	Temperature 24 deg. C,]	Humidity		56% RH			
Test Result:		Pass			Detector		PK			
20dB Bandwidth	04.81kHz	4.81kHz								
Ŕ	Marker 1 [T1 ndB]			RBW	30 k	Hz R	F Att	10 dB		
Ref Lvl	ndB 20.00 dB			VBW	100 k					
0 dBm	BW 40	BW 404.80961924 kHz			SWT 6 ms		Unit		n _	
					v ₁	[T1]	-18	.57 dBn	A	
							2.47499	800 GHz		
-10					ndF	3	20	.00 dB	1	
			1		BW		4.80961			
-20				\ 	∇_{T}	[T1]	-37	.79 dBn		
			J	7	V	2 [T1]	-38	950 GHz .69 dBn		
-30			~~~~\ 	\	1 2	2 [11]	2.47515			
1MAX		T		∇2 					1MA	
-50										
-60		Market								
	and and a second				Mary	munul		^		
							the Market	umand		
-80									-	
-90									-	
-100 Center 2.	475 GHz		200	kHz/			Spa	ın 2 MHz	_	
Date: 21	OCT.2020 14	1:58:16								

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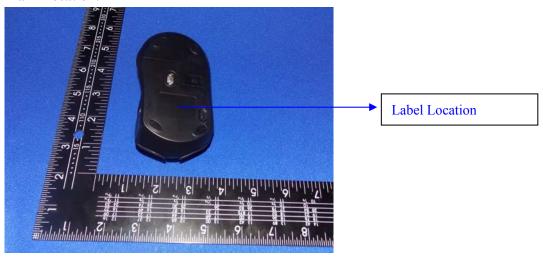


10.0 FCC ID Label

FCC ID: 2AH9Y-YL-WM1807

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

N/A

11.2 Radiated emission test view





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11.3 Photographs – EUT

Outside View



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Outside View



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Outside View



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Inside view



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Inside view



-- End of the report--

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