

Report No.: File Reference No.:	TW2010001E 2020-10-16
Applicant:	Shenzhen Star Sources Electronic Technology Co., Ltd.
Product:	2.4G Wireless PC Mouse
Model No.:	ST-870, ST-397, ST-508, ST-303, ST-086, ST-087
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	electroninghetic comparising
Jack Chung	
Jack Chung	
Manager	

Dated:

October 16, 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



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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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:	
Fax:	

1.3 Description of EUT

1	
Product:	2.4G Wireless PC 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:	N/A
Model Number:	ST-870
Additional Model Name	ST-397, ST-508, ST-303, ST-086, ST-087
Input Voltage:	DC1.5V, 1 pcs AA battery
Modulation Type:	GFSK
Operation Frequency	2402-2480MHz
Channel Numbers:	40
Channel Separation:	2MHz
Antenna Designation	PCB antenna with gain 0dBi Max
Hardware Version:	V1.1
Software Version:	V2.2

1.4 Submitted Sample

1 Sample

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- 1.5 Test Duration 2020-10-09 to 2020-10-16
- 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

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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	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 M/FA		2020-06-23	2021-06-22
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 Frequency	V18.06

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3.0 Technical Details

3.1 Summary of test results

The EUT has been tested according to the following specifications:			
Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.207	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

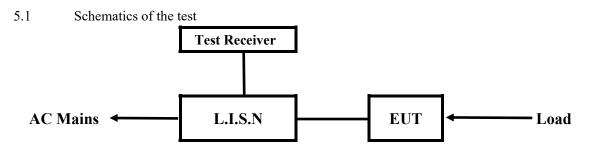
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5. Power Line Conducted Emission Test

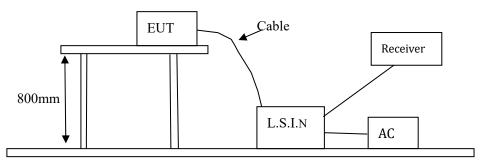


EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2014. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 500hm/50uH as specified by section 5.1 of ANSI C63.4-2014.

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

Device	Manufacturer	Model	FCC ID
2.4G Wireless PC Mouse	Shenzhen Star Sources Electronic Technology Co., Ltd.	ST-870, ST-397, ST-508, ST-303, ST-086, ST-087	ZJEST-870

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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 15.107 and 15.207

	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
$5.00~\sim~30.00$	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.

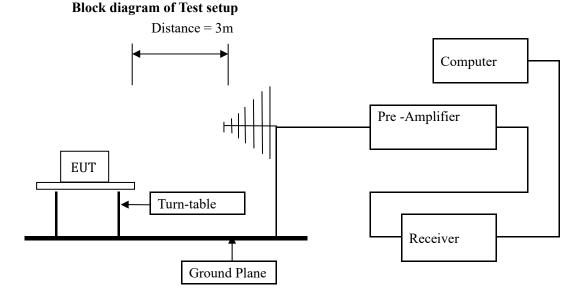
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6 Radiated Emission Test

- 6.1 Test Method and test Procedure:
- 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.



- 6.2 Configuration of The EUT Same as section 5.3 of this report
- 6.3 EUT Operating Condition Same as section 5.4 of this report.

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6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

A FCC Part 15 Subpart C Paragraph 15.249(a) Limit

Fundamental Frequency	Field Stre	ength of Fundame	ntal (3m)	Field S	trength of Harmo	nics (3m)
(MHz)	mV/m	dBu	V/m	uV/m	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 ($dB\mu V/m$)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note: 1. RF Voltage $(dBuV) = 20 \log RF$ 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:	2.4G Wireless PC Mouse	Test Mode:	Keep transmitting-Low Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25°C
	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)
2402	84.16 (PK)	Н	114/94	-9.84
2402	78.13 (PK)	V	114/94	-15.87
4804	50.72 (PK)	Н	74/54	-3.28
4804	49.93 (PK)	V	74/54	-4.07
7206		H/V	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 - 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:	2.4G Wireless PC Mouse	Test Mode:	Keep transmitting-Middle Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25°C
	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)
2440	83.63 (PK)	Н	114/94	-10.37
2440	78.56 (PK)	V	114/94	-15.44
4880	51.49 (PK)	Н	74/54	-2.51
4880	51.03 (PK)	V	74/54	-2.97
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		H/V	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 - 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:	2.4G Wireless PC Mouse	Test Mode:	Keep transmitting-High Channel
Test Item:	Fundamental Radiated Emission	Temperature:	25°C
	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)
2480	84.07 (PK)	Н	114/94	-9.93
2480	78.87 (PK)	V	114/94	-15.13
4960	51.99 (PK)	Н	74/54	-2.01
4960	50.66 (PK)	V	74/54	-3.34
7440		Н	74/54	
7440		V	74/54	
9920		H/V	74/54	
12400		H/V	74/54	
14880		H/V	74/54	
17360		H/V	74/54	
19840		H/V	74/54	
22320		H/V	74/54	
24800		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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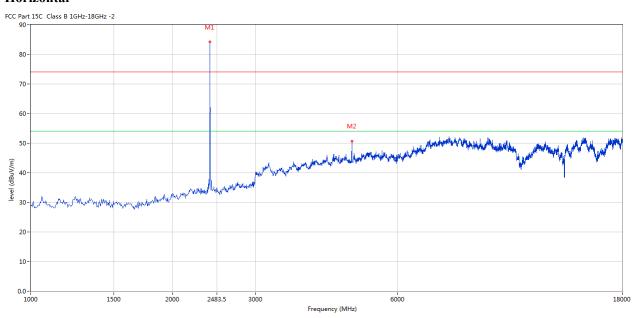
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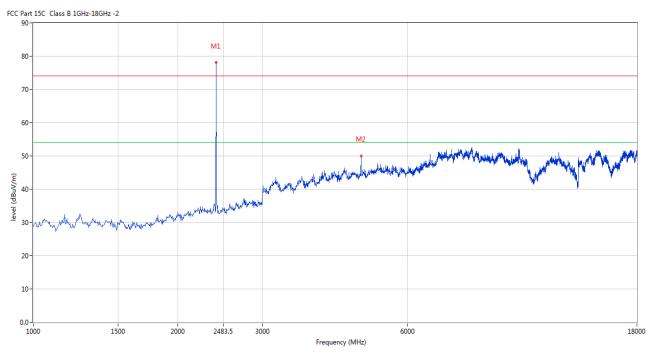


Please refer to the following test plots for details: Low Channel

Horizontal



Vertical

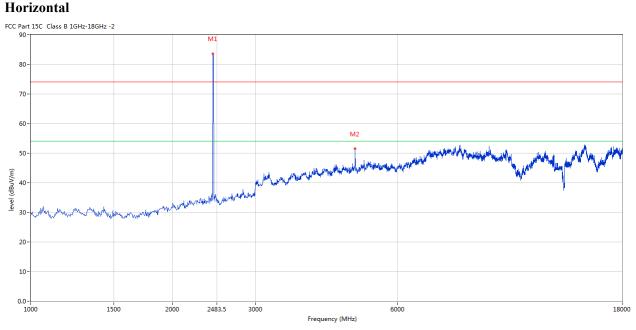


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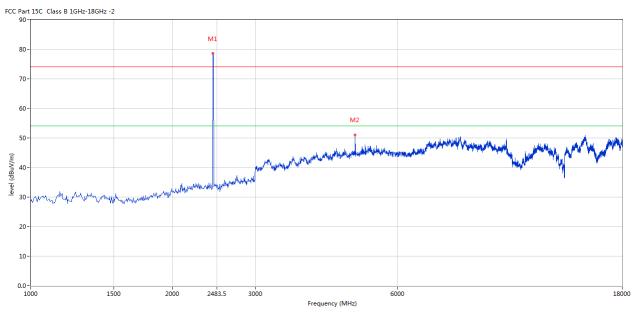
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Please refer to the following test plots for details: Middle Channel



Vertical



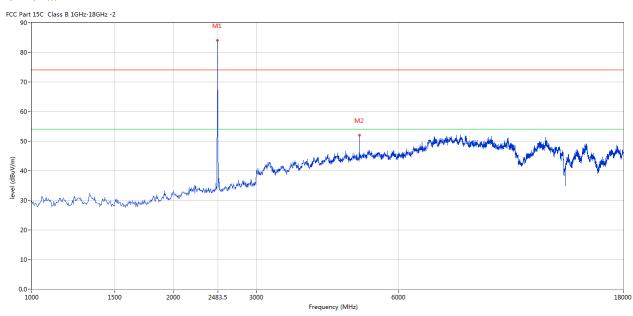
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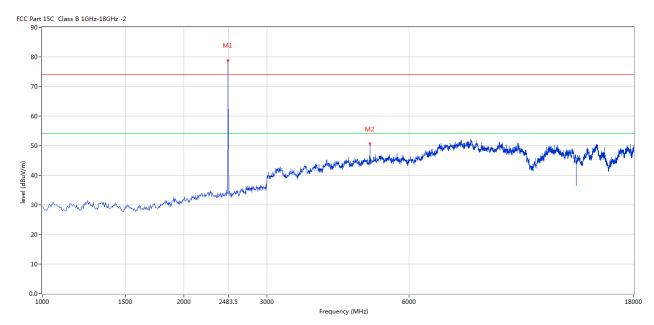


Please refer to the following test plots for details: High Channel

Horizontal



Vertical



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

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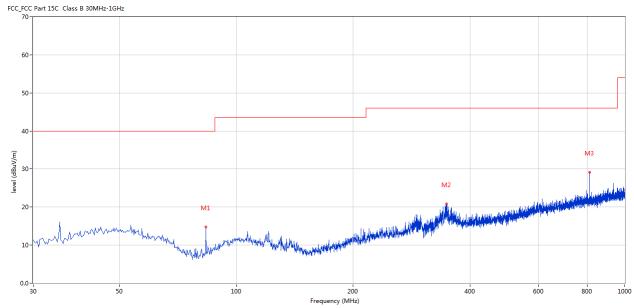
Page 18 of 36

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	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)			(cm)		
1	83.579	14.72	-16.83	40.0	-25.28	Peak	355.00	100	Horizontal	Pass
2	347.353	20.78	-9.42	46.0	-25.22	Peak	325.00	100	Horizontal	Pass
3	812.594	29.11	-2.94	46.0	-16.89	Peak	232.00	100	Horizontal	Pass

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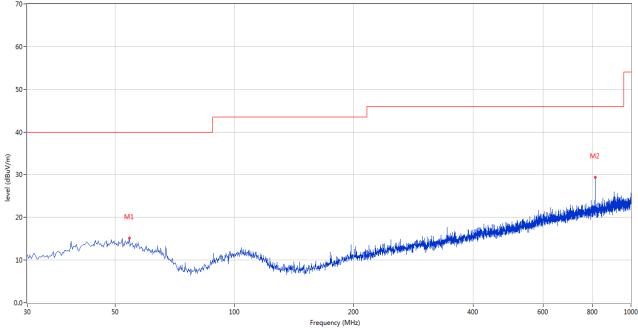
Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual

FCC_FCC Part 15C Class B 30MHz-1GHz



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	54.244	15.18	-11.60	40.0	-24.82	Peak	13.00	100	Vertical	Pass
2	812.352	29.38	-2.93	46.0	-16.62	Peak	318.00	100	Vertical	Pass

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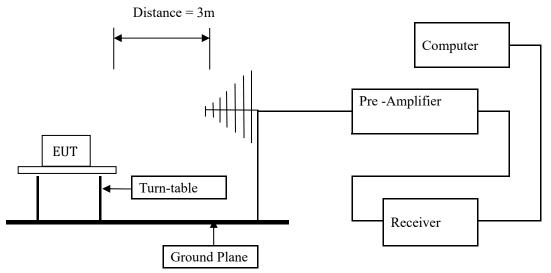


7. Band Edge

7.1 Test Method and test Procedure:

- 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:		2.4G W1re	eless PC Mc	ouse	Pol	arity		Horizontal	
	Mode		Keeping	g Transmittin	ng	Test V	Voltage		DC1.5V	
Ter	nperature		24	deg. C,		Hun	nidity		56% RH	
Tes	st Result:			Pass						
2 Part 15 90-	iC Class B 1GHz-18GHz	z -2							M1	
80-										
70-									MZ	
60-										
50-								/	λ	
40-	here see boo den her here here here here here here her	uhantlerini bashikatene ^g onatikate	h. ben heritet as her as he	Seconda _{r t} er film i de la de la de la dese		ndeitedelen deringen	M3	م منابع المدينة من المدينة المدينة المعالم المدينة المعالم المدينة المراجع المراجع المراجع المراجع المراجع الم		Wide Has shugh inger
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40- 1- 30-	herenselsen her	televelderen besieheten Prositiefe	h fer og skore for støre av døre	desert <mark>e en de la deserve de</mark>	, mir falset e fan ste	nate in the second second	M3 Straffyr condinated forda	Jani Jani Jani Jani Jani Jani Jani Jani		When which we have
40 - 30 - 20 - 10 -	hijessekyi funksikki konsesiese	informitierung bezeichertenen Beseichtenke	h ferrent en er i don tiel en dee	Berrite estruition del freiender	Frequency (MHz		M3	Land Land Contraction of the Con		
40- 30- 20- 10- 0.0- 2350	Frequency	Results	Factor	Limit		Detector	M3	Height	ANT	2410
40- 30- 20- 10- 0.0- 2350	1	Results (dBuV/m)	Factor (dB)		Frequency (MHz	1	1	Height (cm)		2410
40- 30- 10- 2350 NO.	Frequency			Limit	Frequency (MHz	1	1	-		2410
40- 30- 20- 10-	Frequency (MHz)	(dBuV/m)	(dB)	Limit (dBuV/m)	Frequency (MHz Over Limit (dB)	Detector	Table (o)	(cm)	ANT	2410 Verdic

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Product:			Detec	ctor	Vertical						
	Mode	Keeping Transmitting				Test Vo	ltage	DC1.5V			
Temperature Test Result:		24 deg. C, Pass				Humi	dity	56% RH			
C Part 150 90-r	C Class B 1GHz-18GHz	z -2									
									M1		
80-									\wedge		
70-									-/		
60-								M			
_											
50-								/			
								1	· · · · · · · · · · · · · · · · · · ·		
40-							M3				
40-	l miter present al the address of the states of the	undelingungen auf der Staten für die eine Bereichter die eine Bereichter die eine Bereichter die eine Bereichte	ingh yadap loon seeingi yasariyi	notte das kan instructure interfe		h.denterstater habben auf an	M3	Mainford and and marked		"Whater and the state of the	
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30- 20- 10-	l niter program de trabajo de la construire.	nažuse Pare se kontesta se stantas	(taliadae baarsisjon) dersed	nolle das kan normal versendet	Frequency (MHz)		M3 Avantesistantesistantesist	Anton Walkington			
30- 20- 10- 2350	Frequency	Results	Factor	Limit			M3	Height	ANT	2410	
30- 20- 10- 2350	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Frequency (MHz)		hvanjesisterojajes, koderekt	Height (cm)	1	2410	
30- 20- 10- 2350					Frequency (MHz)		hvanjesisterojajes, koderekt	-	1	2410	
30 - 20 - 10 -	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Frequency (MHz) Over Limit (dB)	Detector	Table (o)	(cm)	ANT	2410 Verdict	

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F	Product:		2.4G Wir	eless PC M	ouse	Polar	ity		Horizontal		
	Mode		Keepin	g Transmitti	ng	Test Vo	ltage	DC1.5V			
Temperature 24 deg				4 deg. C,		Humic	lity	56% RH			
Te	Test Result: Pass										
CC Part 15 90	5C Class B 1GHz-18GHz	z -2									
80-				\frown							
70-											
60-				× 1							
50-			/	\							
50-	einnechantachas liden air an	una bin di setta di secondo	/	\ 	A supplicit of the superior	Henry Chiller Hart Starting of the	isi adattikan ya hari da	nightburtha padausaabirt	if Look of the second secon	4.3149.41.444 + 49.844	
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50 - () 40 - 30 - 20 - 10 - 0.0 -		Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	2483.5		Table (o)	Height (cm)	ANT		

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Р	Product:					Detec	tor	Vertical		
	Mode Keeping Transmitting			g	Test Vol	ltage		DC1.5V		
Ter	Temperature 24 deg. C,					Humic	lity		56% RH	
Tes	st Result:			Pass						
CC Part 15 90-r	5C Class B 1GHz-18GH;	z -2								
80-										
60-										
50- Ē										
	retagenst dag staffant om for skipste der skip	nipodetelpationskipeter			March Start Children Bar Chapter	i forda da diferencia da na di fonda da	heiropeningunaliserkeisebeh.e	entratilization of	osistering an adverse of the second	nand address of the factor of
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(W/Mgb) Iana) 30 -	signed by all serve in the school	nipole (closical de division de			and the second s	igodashullançasırlanşarşındarı	heirepesinen also teratekse	antinishing hava at	gest förstade kom aller ad en som det en som d	1
40- 30- 20-		nirossukjestektekere		24	483.5 Frequency (MHz)		herrepersiven al hor denstad a	anti assidan da anti a	good for the second to an advance to a	2500
(L) 40- (L)		Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	483.5		Table (o)	Height	ANT	2500

Note: The measured PK value less than the AV limit, no necessary to take down the AV measurement result.

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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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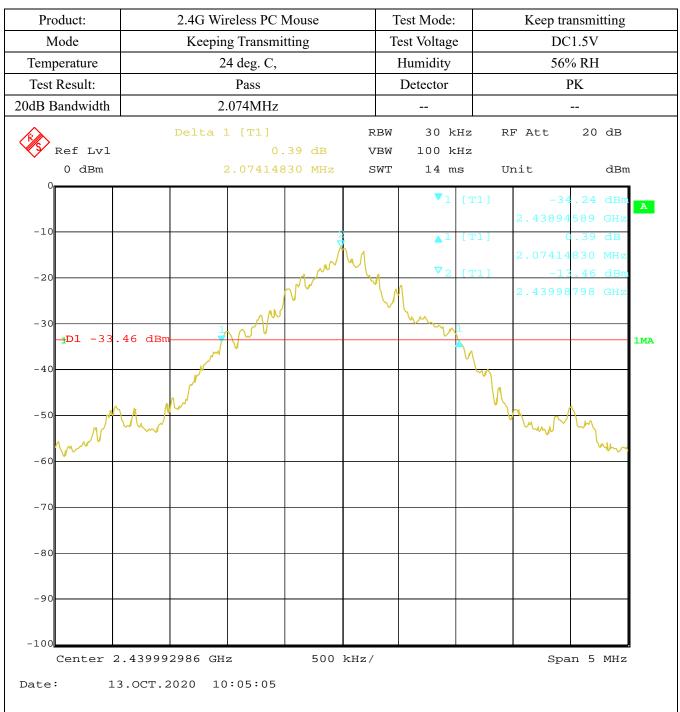


Product:	2.4G Wireless PC Mouse					est Mode:	Keep transmitting				
Mode	Keeping Transmitting					st Voltage	DC1.5V				
Temperature	24 deg. C,					Iumidity		56% RH			
Test Result:	Pass					Detector	РК				
20dB Bandwidth	2.034MHz										
	Delta	1 [T1]		RI	ЗW	30 k	Hz 1	RF Att	20 dB		
Ref Lvl		0.	.41 dB	VI	З₩	100 k	Hz				
0 dBm		2.034068	314 MHz	SI	νT	14 m	s 1	Jnit	dBr	n	
0						v 1	[T1]	-33	2.79 dBm	A	
								2.40096	5293 GHz		
-10			X			1	[T1]	(.41 dB	1	
			and a	\mathcal{M}		▼2		2.03406			
-20				- \1		* 2	[T1]	-1:	2.59 dBm 3497 GHz		
			V		\cup			2.40170			
-30 	dBm					- Jon					
1	كمبر المطلق	V v					h			11	
-40							- m				
-50	\sim							hund	M.		
-60											
-70											
-80											
-90											
										Í	
-100										Į	
Center 2.40	2 GHz		500	kHz/				Spa	an 5 MHz		

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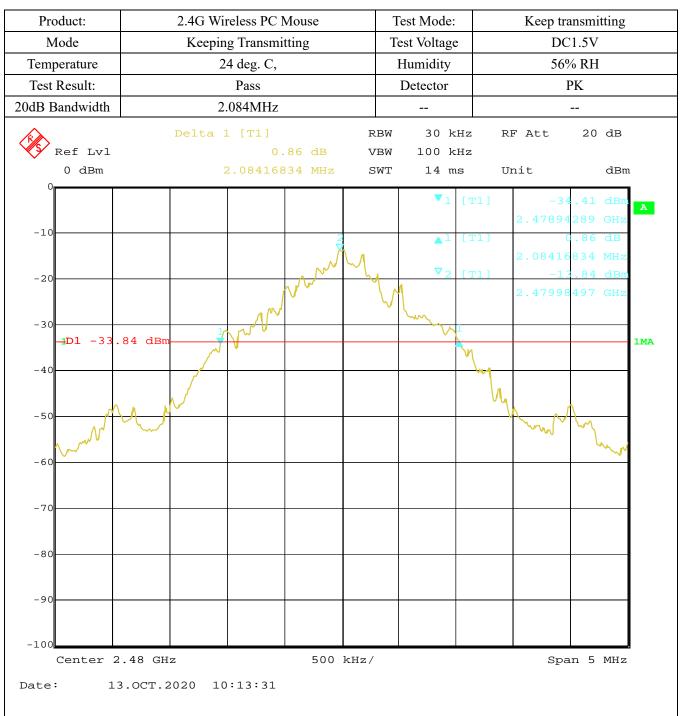




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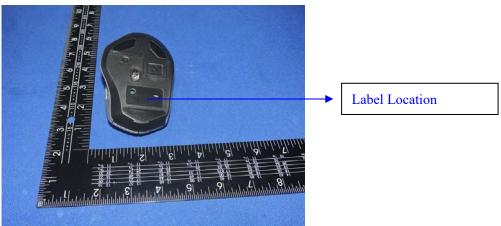
Page 29 of 36

10.0 FCC ID Label

FCC ID: ZJEST-870

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:



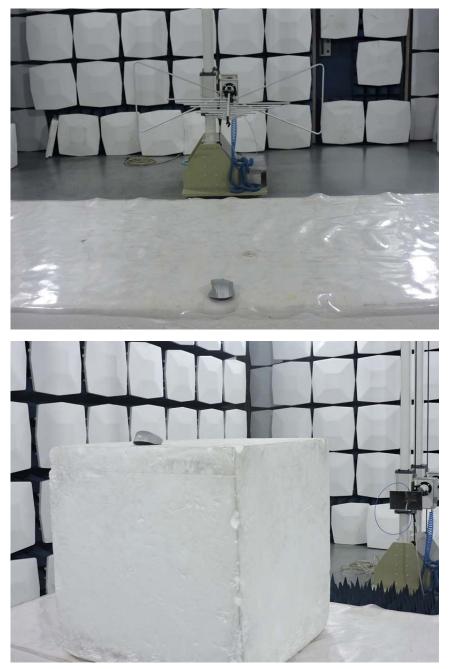
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11.0 Photo of testing

- 11.1 Conducted test View N/A
- 11.2 Radiated emission test view



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11.3 Photographs – EUT



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Outside View



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Outside View



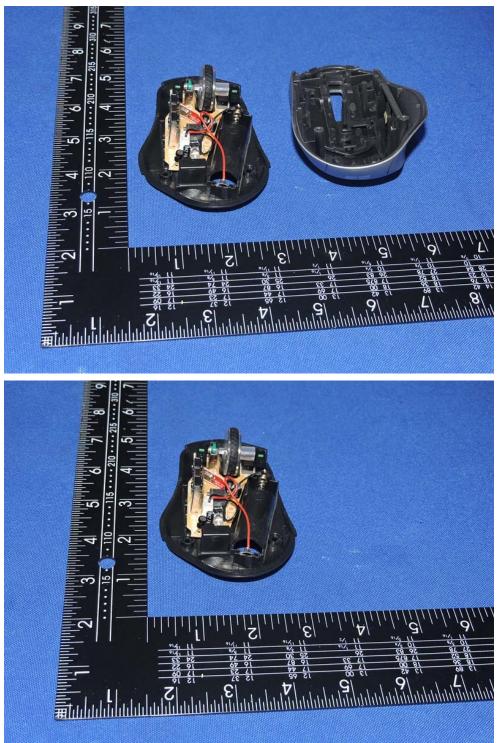
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Inside view

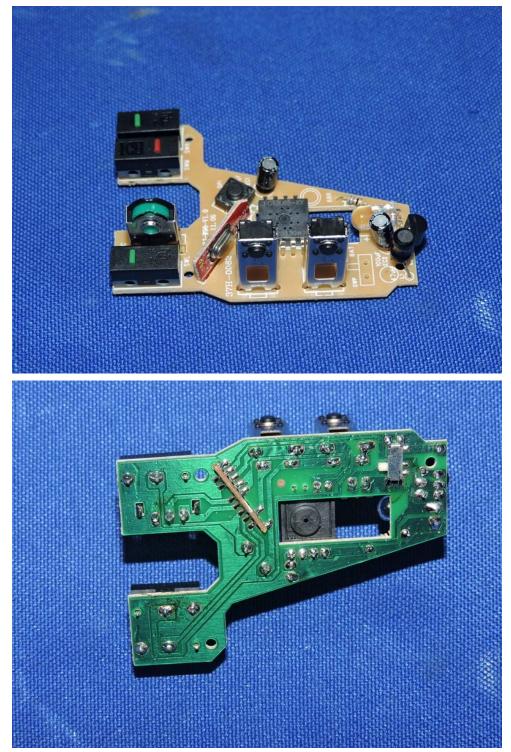


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Inside view



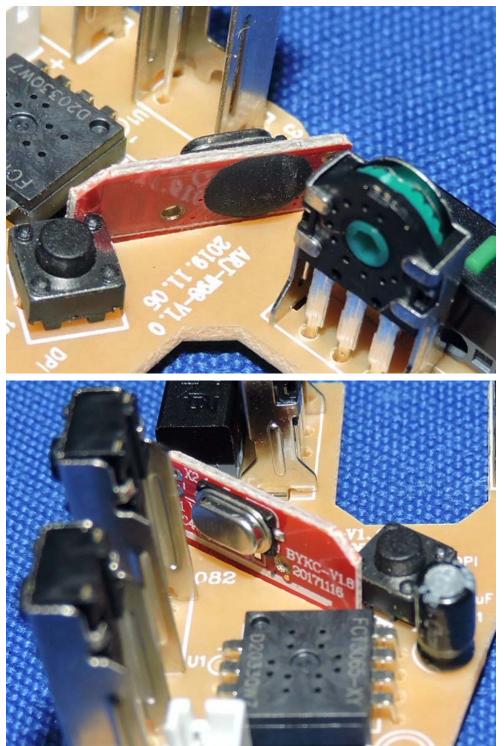
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Inside view



--End of the report--

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