

Report No.: TW2203020E File reference No.: 2022-04-02

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

Product: Keyboard and Mouse Bundle

Model No.: ST-117, 2RBCP1513B0BL, ST-536,

ST-xyz (X=0~9, Y=0~9, Z=0~9)

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

electromagnetic compatibility

Approved By

Terry long

Terry Tang

Manager

Dated: April 02, 2022

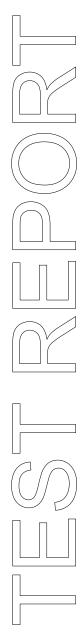
Results appearing herein relate only to the sample tested

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 17025:2005 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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1.6

6.2

11.0



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	EUT Operating Condition

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Photo of Test Setup and EUT View.....

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

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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: Room2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District, Shenzhen, China

Telephone: +86-755-86397260 Fax: +86-755-26609516

1.3 Description of EUT

Product: Keyboard and Mouse Bundle

Manufacturer: Star Technology Industrial Co., Ltd.

Address: Room2102, Block 1st, Yi Luan Building, Xixiang Road 230, BaoAn District,

Shenzhen, China

Trademark: N/A Model Number: ST-117

Additional Model Name 2RBCP1513B0BL, ST-536, ST-xyz (X=0~9, Y=0~9, Z=0~9)

Rating: DC1.5V

Battery 1pc AA battery

Modulation Type: GFSK

Operation Frequency: 2402-2480MHz

Channel Number: 40 Channel Separation: 2MHz

Serial No.: 16264LW100001

Antenna Designation PCB antenna with gain -1.52dBi Max (Get from the antenna specification)

1.4 Submitted Sample: 1 Sample

1.5 Test Duration

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2022-03-02 to 2022-04-02

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	2021-06-18	2022-06-17
LISN	R&S	EZH3-Z5	100294	2021-06-18	2022-06-17
LISN	R&S	EZH3-Z5	100253	2021-06-18	2022-06-17
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2021-06-18	2022-06-17
Loop Antenna	EMCO	6507	00078608	2021-06-18	2024-06-17
Spectrum	R&S	FSIQ26	100292	2021-06-18	2022-06-17
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2021-07-02	2024-07-01
Horn Antenna	R&S	BBHA 9120D	9120D-631	2021-07-02	2024-07-01
Power meter	Anritsu	ML2487A	6K00003613	2021-06-18	2022-06-17
Power sensor	Anritsu	MA2491A	32263	2021-06-18	2022-06-17
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2021-07-02	2024-07-01
9*6*6 Anechoic			N/A	2021-07-02	2022-07-01
EMI Test Receiver	RS	ESVB	826156/011	2021-06-18	2022-06-17
EMI Test Receiver	RS	ESH3	860904/006	2021-06-18	2022-06-17
Spectrum	HP/Agilent	ESA-L1500A	US37451154	2021-06-18	2022-06-17
Spectrum	HP/Agilent	E4407B	MY50441392	2021-06-18	2022-06-17
Spectrum	RS	FSP	1164.4391.38	2022-01-15	2023-01-14
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2021-06-18	2022-06-17
RF Cable	Zhengdi	7m		2021-06-18	2022-06-17
RF Switch	EM	EMSW18	060391	2021-06-18	2022-06-17
Pre-Amplifier	Schwarebeck	BBV9743	#218	2021-06-18	2022-06-17
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2021-06-18	2022-06-17
LISN	SCHAFFNER	NNB42	00012	2022-01-05	2023-01-04

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 15.203	Antenna Requirement	Pass	Complies
FCC Part 15, Paragraph 15.207	Conducted Emission Test	N/A	N/A
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

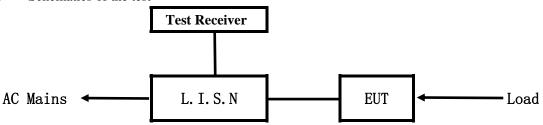
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5. Power Line Conducted Emission Test

5.1 Schematics of the test

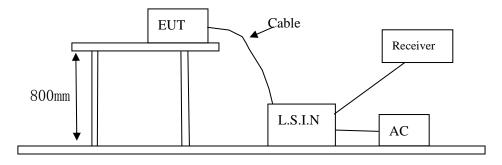


EUT: Equipment Under Test

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.

40 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID	
Keyboard and Mouse	Star Technology	ST-117, 2RBCP1513B0BL, ST-536,	ZIECT 117	
Bundle	Industrial Co., Ltd.	ST-xyz (X=0~9,Y=0~9,Z=0~9)	ZJEST-117	

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B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
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

Frequency	Limits (d	IB μV)		
(MHz)	Quasi-peak Level	verage Level		
0.15 ~ 0.50	66.0~56.0*	56.0~46.0*		
0.50 ~ 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

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

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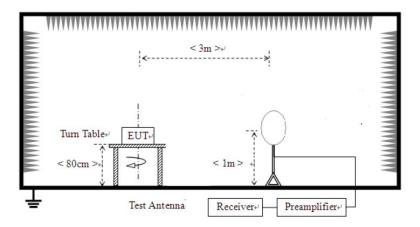


6 Radiated Emission Test

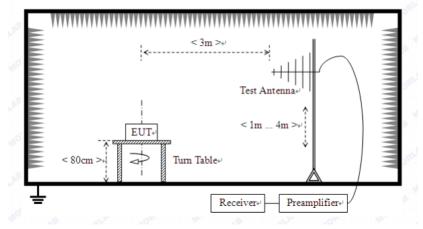
- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size 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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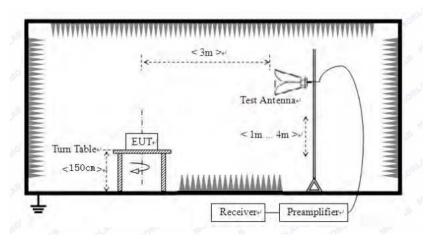
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For radiated emissions above 1GHz



- 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.
- 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 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 $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

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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 $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT
- 4. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.
- 5. All scanning using PK detector. And the final emission level was get using QP detector for frequency range from 30-1000MHz.As to 1G-25G, the final emission level got using PK. For fundamental measurement, PK detector used.
- 6. 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.
- 7. New battery was used during tests.

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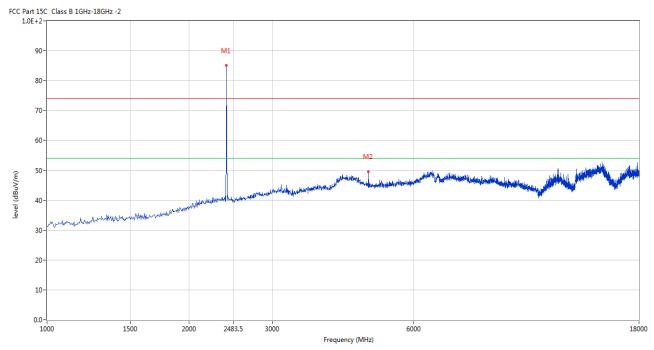


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2402MHz

Horizontal



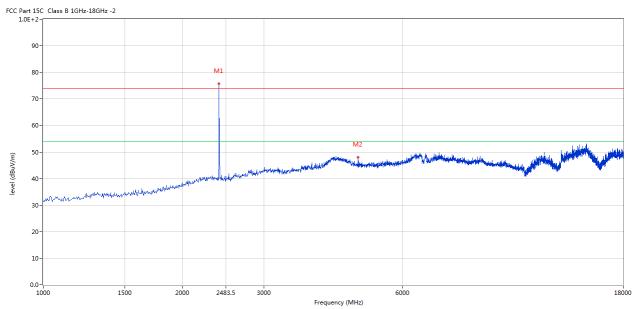
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.025	85.07	-3.57	114.0	-28.93	Peak	95.00	100	Horizontal	Pass
2	4802.799	49.52	3.12	74.0	-24.48	Peak	64.00	100	Horizontal	Pass

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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	2402.025	75.79	-3.57	114.0	-38.21	Peak	148.00	100	Vertical	Pass
2	4802.799	47.98	3.12	74.0	-26.02	Peak	154.00	100	Vertical	Pass

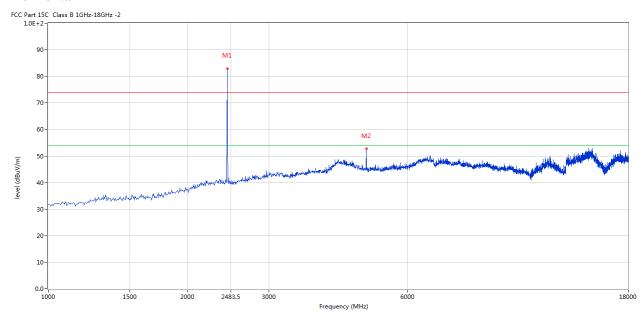
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Please refer to the following test plots for details: Middle Channel-2440MHz

Horizontal



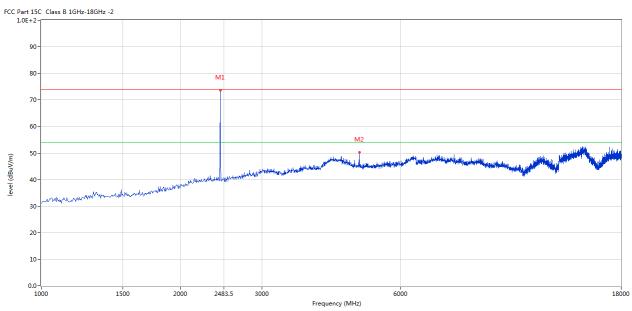
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2440.035	82.70	-3.57	114.0	-31.30	Peak	132.00	100	Horizontal	Pass
2	4879.280	52.72	3.20	74.0	-21.28	Peak	69.00	100	Horizontal	Pass

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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	2440.035	73.58	-3.57	114.0	-40.42	Peak	140.00	100	Vertical	Pass
2	4879.280	50.26	3.20	74.0	-23.74	Peak	196.00	100	Vertical	Pass

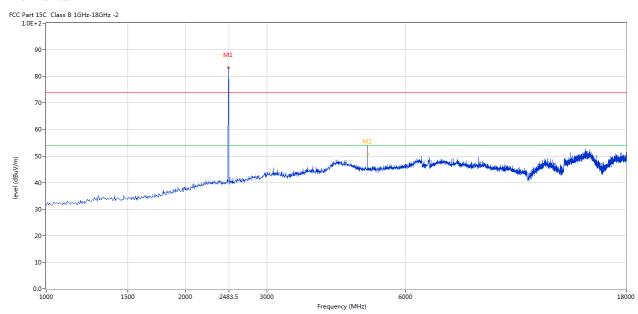
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(0)	(cm)		
1	2480.025	83.66	-3.57	114.0	-30.34	Peak	236.00	100	Horizontal	Pass
2	4960.010	53.97	3.36	74.0	-20.03	Peak	75.00	100	Horizontal	Pass
2**	4960.010	50.69	3.36	54.0	-3.31	AV	75.00	100	Horizontal	Pass

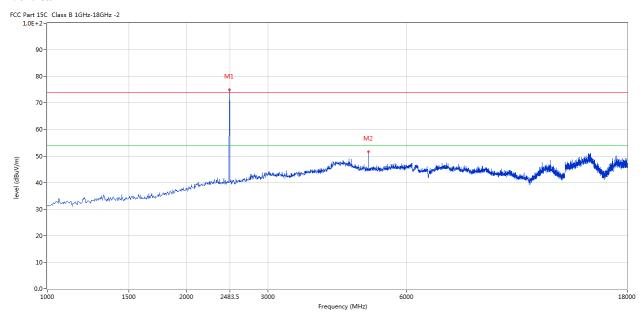
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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480.025	75.17	-3.57	114.0	-38.83	Peak	1.00	100	Vertical	Pass
2	4960.010	51.66	3.36	74.0	-22.34	Peak	202.00	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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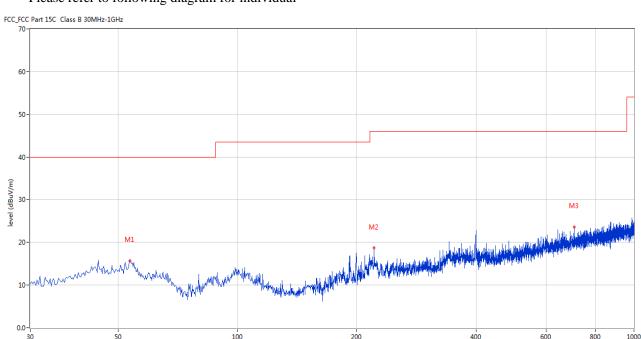


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	53.517	15.70	-11.52	40.0	-24.30	Peak	323.00	100	Horizontal	Pass
2	221.042	18.66	-13.27	46.0	-27.34	Peak	309.00	100	Horizontal	Pass
3	707.376	23.65	-3.87	46.0	-22.35	Peak	330.00	100	Horizontal	Pass

Frequency (MHz)

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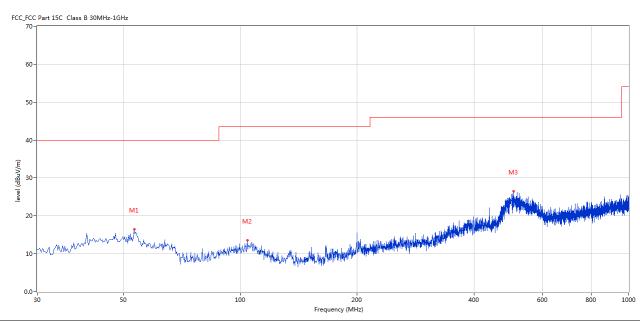


Radiated Emission In Vertical (30MHz----1000MHz)

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	53.274	16.53	-11.51	40.0	-23.47	Peak	44.00	100	Vertical	Pass
2	104.186	13.58	-13.30	43.5	-29.92	Peak	39.00	100	Vertical	Pass
3	505.424	26.54	-6.95	46.0	-19.46	Peak	22.00	100	Vertical	Pass

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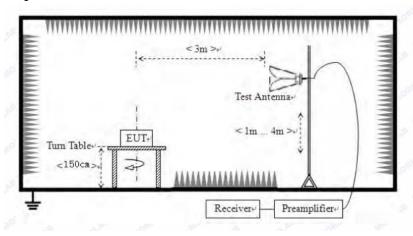


7. Band Edge

7.1 Test Method and test Procedure:

- (1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.
- (3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (4) The antenna polarization: Vertical polarization and Horizontal polarization.

7. 2 Radiated Test Setup



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

7.3 Configuration of The EUT

Same as section 5.3 of this report

7.4 EUT Operating Condition

Same as section 5.4 of this report.

7.5 Band Edge Limit

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

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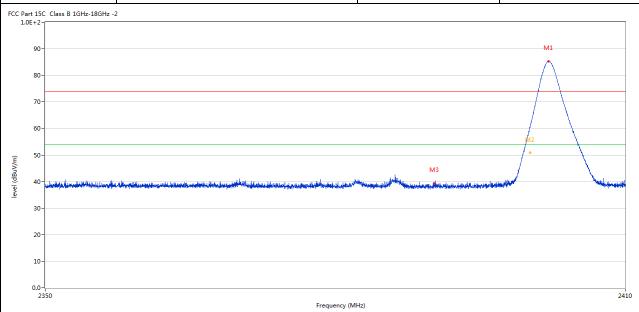
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7.6 Test Result

Product:	Keyboard and Mouse Bundle	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC1.5V
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	2401.977	85.33	-3.57	74.0	11.33	Peak	96.00	100	Horizontal	N/A
2	2400.042	60.26	-3.57	74.0	-13.74	Peak	100.00	100	Horizontal	Pass
2**	2400.042	50.76	-3.57	54.0	-3.24	AV	100.00	100	Horizontal	Pass
3	2390.085	39.41	-3.53	74.0	-34.59	Peak	110.00	100	Horizontal	Pass

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I	Product:	Keyl	ooard and N	Mouse Bundle	e	Detecto	or	7	Vertical	
	Mode	ŀ	Keeping Tra	ansmitting		Test Volt	age	Ι	DC1.5V	
Te	mperature		24 deg. C,			Humidity		56% RH		
Te	est Result:		Pas	SS						
C Part 1	5C Class B 1GHz-18GHz	-2								
91	0-									
80	0-							M1		
70	0-							$ \longrightarrow $		
60	0-							M2		
50	0-							1814		
41	O-	ودواله والمراجعة أوراه والمراجعة والمراجعة	and the second second second		والمابان التفاد فودوالات	M3	وريا الموادية الموادية والموادية والموادية والموادية والموادية والموادية والموادية والموادية والموادية والمواد	مونوا المهداء	- Contraction of the Contraction	الطيعادية
3(0-									
20	0-									
10	0-									
0.0	0- 2350									2410
	1	1		1	quency (MHz)		<u> </u>		1	l
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verd
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402.022	75.70	-3.57	74.0	1.70	Peak	151.00	100	Vertical	N/A
2	2399.998	50.49	-3.57	74.0	-23.51	Peak	151.00	100	Vertical	Pass
	2390.070	39.27	-3.53	74.0	-34.73	Peak	307.00			

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Proc	duct:	K	eyboard a	and Mouse I	Bundle		Polarity	y	Horizon	tal
Mo	ode		Keeping	g Transmitti	ing	,	Test Volta	age	DC1.5	V
Tempe	erature		24	4 deg. C,			Humidit	ty	56% R	Н
Test R	Result:			Pass						
CC Part 15C Cla 1.0E+2-	lass B 1GHz-18GHz -	2								
90-										
80-										
70-										
				X						
60-			+-							
-				M2						
	vandakky nausiavnaka 2014 dapjen j	ndandanasan kilikala dingkin		M2	majoration	alternatural nations strategic and	المنافعة والمنافعة المنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة والمنافعة وا	stjewend draft bjeke State Andrew State Andrews	politika aj kalainak (kispalifaksi paksi dise	the second a
	wantahi amuumaha siiddu faa	in the state of th		M2	and the state of t	tiligen frankling skielen hit skierejd – an	neckatik sa promjet tida fulf drile satike	المتعارضة المتعارضة والمتعارضة والمتعارضات والمتعارضة والمتعارضة والمتعارضة والمتعارضة والمتعارضة والمتعارض والمتعارضة والمتعارضة والمتعارضة والمتعارضة والمتعارضة والمتعارض والمتعارضة والمتعارضة والمتعارضة والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض والمتعارض و	përdhapi deshe singifasi ndevlas	والروود المارود
50-	randahi amummah mistharia.	in the contract of the contrac		M2	and the state of t	illen-heid allen steineid og	المنافقة والمنافقة و	esterated a company to such the second	ari afte aft deise de constitue de la constitu	and and all
50- 40-	wandaliya asusawa kin sidahiri fand	in San i San course prijektivit in Armetika		M2	and in solve a such	dien-freid stalenzieren). og	neiddio ar wegainh feli brill, sillen	niyedad kariya saddi dhaqaa	part of the distribution of the state of the	nek araba
30- 20-	wastakisanuumuulusetekuspaa	in turn plant the published by the state of		M2	and the said	till og de steller til steller og de	neritation as rec _{rea} nt in a faithful state.	nigeriadina kiriliya sadaki dikebirik	garage application to the state of the state	ne n
30 - 20 -	wantahi amuunneele siirikkulee	in time disease date phillips his principal design of the state of the		M2 2483	,	idigadi atalo n stajogi . e g	nesiste ne verme i de full trit stille	eneral de constitue de la const	paragha aga dhaicheach an an dhaicheach an dhaicheach an dhaicheach an dhaicheach an dhaicheach an dhaicheach	2500
30 - 20 - 10 - 2470	requency	Results	Factor	Limit M2	.5	Detector	Table	Height	ANT	
30- 20- 20- 2470			Factor (dB)	T	.5 Frequency (MHz)					2500
30- 20- 10- 2470 No. Fre	requency	Results		Limit	.5 Frequency (MHz)		Table	Height		2500

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ı	Product:		and Mouse H					Vertica	al	
	Mode		Keepin	ng Transmitti	ng	Г	est Volta	age	DC1.5	V
Te	Temperature 2 Test Result:			4 deg. C,			Humidi	ty	56% R	Н
Te	rt 15C Class B 1GHz-18GHz -2			Pass						
CC Part 1 1.0E+:		-2								
9	0-									
8	0-									
				\						
7										
6	0-									
5	0-		f	M2						
5	0-	the distribution to the state of		M2	and helling to the state of the second	alanthi wanda an		illik ka jaliyaka fi Bhaga fi jalik Unives	and the state of t	La <mark>lladian silik</mark>
5 4 3	O-	indianing and a second a second and a second a second and		M2	man da dikana peneranakan mananan manana	alaski, visidaas salatad	udipelada indentina	iliska indipela habasah, anderbirikea	erikaa dada jihii ku ee ah kaan ka aa daad	La Marian aris
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E/Appan) 4		in digital de para any ng digital ang ang ang ang ang		M2	tina di dia dia mandri	nd mathematican and training	militari de carine de la carine d	iliska atiyaka fasayah, maabiirisaa	nthe and make the size of a state of a patient	d of the state of
3· 2· 1·		ina diginalina sana sana sana di sana d		M2	many hita hillingan separa para para kayaran ara sa	etnikkyntendros caternel	ritigatini antoni esta primari	iiska,aiydafdaaykanddiisiisa	anthorn de plante en establista de la constante en establista de la constante en establista de la constante en	de the description of the second seco
3· 2· 1·		han digita di dina pangangan kan di dina pangan kan di dina pangan kan di dina pangan kan di dina pangan kan d		2483.5	equency (MHz)	eknikki visi dina caracan	will print and account to the second	ilis karangala pangkanahan inter	ahandahajia mesuwi esem	2500
3 3 2 1 0 .		Results	Factor	2483.5		Detector	Table	Height	ANT	2500
3 3 2 1 0 .	0-		Factor (dB)	2483.5 Fr	equency (MHz)					2500
3: 2: 1:	0	Results		2483.5 Fr	equency (MHz) Over Limit		Table	Height		4

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 -1.52dBi Max. It fulfills the requirement of this section. Test Result: Pass

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9.0 20dB Bandwidt	h Measurement				
Product:	Keyboard and Mouse	Bundle	Test Mode:	Keep tran	smitting
Mode	Keeping Transmit	ting	Test Voltage	DC1	.5V
Temperature	24 deg. C,	Humidity	56% RH		
Test Result:	Pass	Detector	PK		
20dB Bandwidth	2.164MHz				
	Delta 1 [T1]	RI			20 dB
Ref Lvl 10 dBm	0.2 2.1643286		$300~\mathrm{kH}$		dBm
10					
			V 1	[T1] -22 2.40094	.52 dBm 289 GHz
0		Z Z	<u>1</u>	[T1]	.22 dB
			∇_2	2.16432	
-10	/	· \		[T1] -2 2.40202	.69 dBm 505 GHz
-20 -1D1 -22.6	9 dBm		V		1MA
					IMA
-30				m	
~~~~	hallow			Munu	~
-40					- WANDE
-50					
-60					
-70					
- 70					
-80					
-90					
Center 2.	402 GHz	500 kHz/		Spa	n 5 MHz
Date: 28.	MAR.2022 14:24:43				

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Product:	Keyboard and Mouse Bundle	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC1.5V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	2.184MHz		
Ref Lvl	Delta 1 [T1] 0.58 dE	RBW 100 kHz	
10 dBm	2.18436874 MH		Unit dBm
10		▼ ₁ [3	21 22 22
		2	71] -21.57 dBm 2.43892285 GHz
0	<u></u>	<u> </u>	[1] (.58 dB) 2.18436874 MHz
-10		∀2 [5	r1l -1.37 dBm
		1	2.44003507 GHz
-20—D1 -21.	37 dBm	<del> </del>	1MA
-30			
-40 m	Mun of		May m
-50			
-60			
-70			
-80			
-90			
Center 2	.44 GHz 50 3.MAR.2022 14:39:58	0 kHz/	Span 5 MHz

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Product:	Keyboard and Mouse	Bundle	Test Mode:	Keep trans	smitting
Mode	Keeping Transmit	ting	Test Voltage	DC1.	5V
Temperature	24 deg. C,		Humidity	56% l	RH
Test Result:	Pass		Detector	PK	
OdB Bandwidth	2.194MHz				
	Delta 1 [T1]	J	RBW 100 kH	z RF Att	20 dB
Ref Lvl	0.	84 dB	VBW 300 kH	z	
10 dBm	2.194388	78 MHz	SWT 5 ms	Unit	dBm
10			<b>V</b> 1 [	[T1] -21.	20 dBm
		0		2.4789128	83 GHz
0		$\wedge$	<u> 1</u>		84 dB
		/ ~   ~	$\nabla_2$	2.194388	
-10	<i></i>	,	V 2	2.4800250	30 dBm
-20 -21 -21 -2	1			1	JS GHZ
D1 -21.3 (	dBm				1M2
2.0				7	
-30	\( \sigma^{\sigma'} \)				
M. D. WALL	March 1				m
-40					
-50					
-60					
-70					
-80					
-90					

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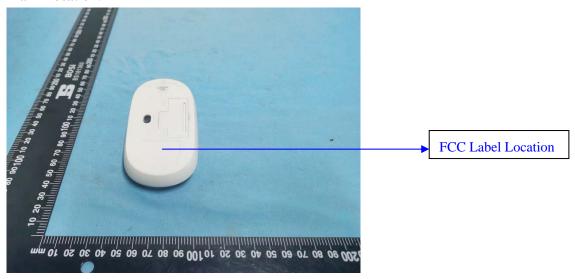


#### 10.0 FCC ID Label

#### FCC ID: ZJEST-117

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

Radiated emission test view





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#### 11.2 Photographs – EUT

Outside View



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Outside View





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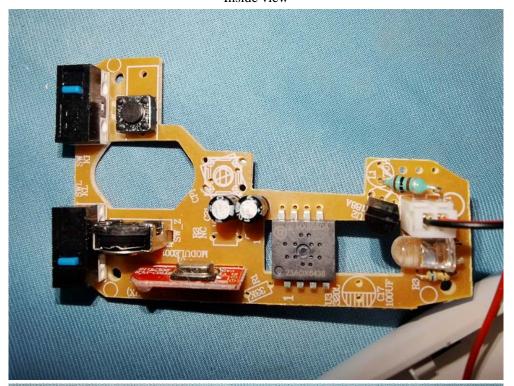
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Inside view





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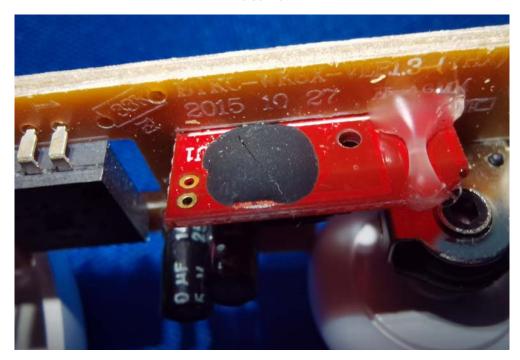
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Inside view





-- End of the report--

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