



File reference No.: 2022-03-10

Applicant: Eastern Times Technology Co.,Ltd

Product: 3 MODES 78 KEY MECHANICAL KEYBOARD

Model No.: K626P-KBS, ET-8652, ET-8653, ET-8768, ET-8772,

K626P-KNS, K626P-KRS, K626P-WBS, K626P-WNS,

K626P-WRS

Trademark: REDRAGON

Test Standards: FCC Part 15.249

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10 &FCC Part 15 Subpart C,

Paragraph 15.249 regulations for the evaluation of

electromagnetic compatibility

Approved By

Terry Tang

Manager

Dated: March 10, 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

Date: 2022-03-10



## Test Report Conclusion

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#### 1.0 General Details

#### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le

Village, Nanshan District, Shenzhen, China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 744189 For 3m Anechoic Chamber

#### 1.2 Applicant Details

Applicant: Eastern Times Technology Co.,Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town, Dongguan City,

Guangdong, China.

Telephone: --Fax: --

#### 1.3 Description of EUT

Product: 3 MODES 78 KEY MECHANICAL KEYBOARD

Manufacturer: Eastern Times Technology Co.,Ltd

Address: Building D, Nan An Industrial Area, Youganpu Village, Fenggang Town,

Dongguan City, Guangdong, China.

Trademark: REDRAGON

Additional Trademark: N/A

Model Number: K626P-KBS

Additional Model Name ET-8652, ET-8653, ET-8768, ET-8772, K626P-KNS, K626P-KRS, K626P-WBS,

K626P-WNS, K626P-WRS

Serial No.: RDK626P-KBS22022600707
Rating: DC5V, 780mA or 3.7V, 250mA
Battery: DC3.8V, 1600mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2402-2480MHz

Channel Separate: 1MHz
Channel Number: 79

Antenna Designation PCB antenna with gain -1.85dBi maximum (Declared by the Manufacturer)

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1.4 Submitted Sample: 1 pc

1.5 Test Duration

2022-03-03 to 2022-03-10

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: Terry Tang

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	l 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	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	Pass	Complies
FCC Part 15, Paragraph 15.209	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies

#### 3.2 **Test Standards**

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

#### 4.0 **EUT Modification**

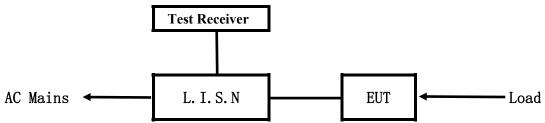
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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#### 5. Power Line Conducted Emission Test

#### 5.1 Schematics of the test

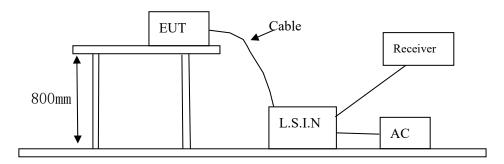


EUT: Equipment Under Test

#### 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013. The Frequency spectrum from 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10 –2013.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



#### 5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

79 channels are provided to the EUT

#### A. EUT

Device	Manufacturer	Model	FCC ID
3 MODES 78 KEY		K626P-KBS, ET-8652, ET-8653,	
MECHANICAL	Eastern Times	ET-8768, ET-8772, K626P-KNS,	TUVET-8652
KEYBOARD	Technology Co.,Ltd	K626P-KRS, K626P-WBS,	10 VE1-0032
KE I DUAKU		K626P-WNS, K626P-WRS	

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#### B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

#### C. Peripherals

Device	Manufacturer	Model	Rating
Power Supply	KEYU	KA23-0502000DEU	Input: 100-240V~, 50/60Hz, 0.35A;
			Output: DC5V, 2A

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013

- 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 (dB μ V)			
(MHz)	Quasi-peak Level	Average Level		
$0.15 \sim 0.50$	66.0~56.0*	56.0~46.0*		
$0.50 \sim 5.00$	56.0	46.0		
$5.00 \sim 30.00$	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:

Pass

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

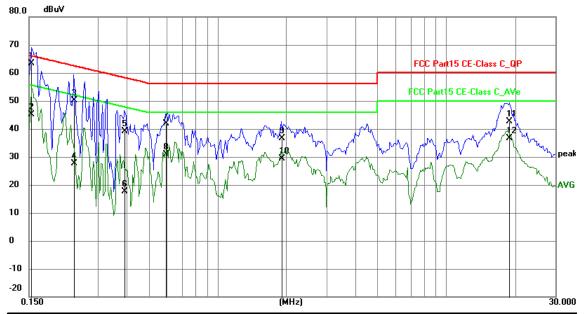
#### **EUT Operating Environment**

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	53.50	9.78	63.28	65.79	-2.51	QP	Р
2	0.1539	35.26	9.78	45.04	55.79	-10.75	AVG	Ъ
3	0.2358	40.38	9.75	50.13	62.24	-12.11	QP	Ъ
4	0.2358	17.97	9.75	27.72	52.24	-24.52	AVG	Р
5	0.3918	29.40	9.76	39.16	58.03	-18.87	QP	Р
6	0.3918	7.96	9.76	17.72	48.03	-30.31	AVG	Ъ
7	0.5946	32.00	9.77	41.77	56.00	-14.23	QP	П
8	0.5946	21.22	9.77	30.99	46.00	-15.01	AVG	Ъ
9	1.9050	26.79	9.80	36.59	56.00	-19.41	QP	Р
10	1.9050	19.49	9.80	29.29	46.00	-16.71	AVG	Р
11	18.8885	32.03	10.61	42.64	60.00	-17.36	QP	Р
12	18.8885	26.13	10.61	36.74	50.00	-13.26	AVG	Р

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

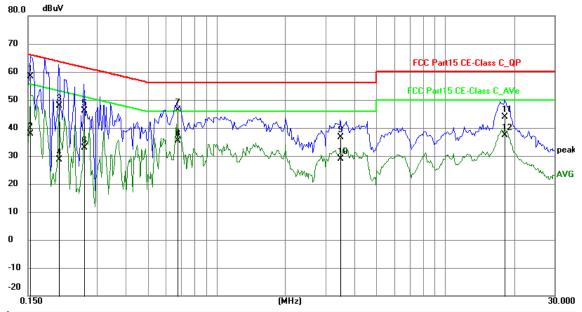
**EUT Operating Environment** 

Temperature: 25°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

**EUT set Condition: Communication by BT** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	48.71	9.78	58.49	65.79	-7.30	QP	Р
2	0.1539	27.99	9.78	37.77	55.79	-18.02	AVG	Р
3	0.2046	38.25	9.75	48.00	63.42	-15.42	QP	Р
4	0.2046	18.89	9.75	28.64	53.42	-24.78	AVG	Р
5	0.2631	36.47	9.75	46.22	61.33	-15.11	QP	Р
6	0.2631	23.19	9.75	32.94	51.33	-18.39	AVG	Л
7	0.6726	36.50	9.78	46.28	56.00	-9.72	QP	Р
8	0.6726	25.49	9.78	35.27	46.00	-10.73	AVG	Р
9	3.4836	26.69	9.86	36.55	56.00	-19.45	QP	Р
10	3.4836	19.11	9.86	28.97	46.00	-17.03	AVG	Р
11	18.1514	33.43	10.57	44.00	60.00	-16.00	QP	Р
12	18.1514	26.82	10.57	37.39	50.00	-12.61	AVG	Р

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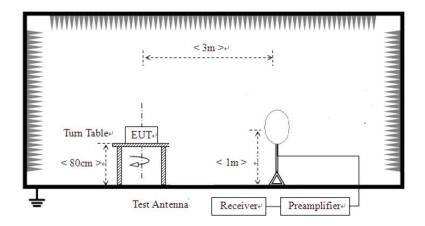


#### **6** Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz (Note: for Fundamental frequency radiated emission measurement, RBW=3MHz, VBW=10MHz). Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) The antenna polarization: Vertical polarization and Horizontal polarization.

#### **Block diagram of Test setup**

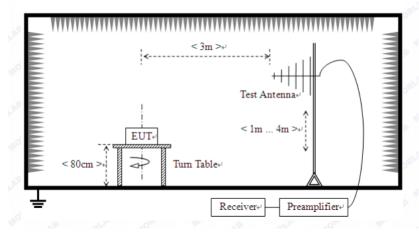
For radiated emissions from 9kHz to 30MHz



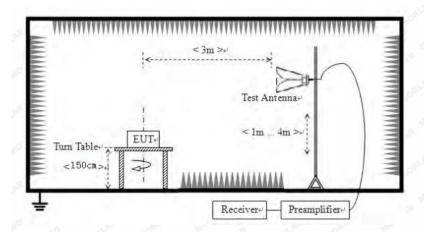
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For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition

  Same as section 5.4 of this report.

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#### 6.4 Radiated Emission Limit

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

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

Fundamental Frequency	Field Stre	Strength of Fundamental (3m)			Field Strength of Harmonics (3m)		
(MHz)	mV/m	dBuV/m		uV/m	dBuV/m		
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)	

Note:

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

#### B. Frequencies in restricted band are complied to limit on Paragraph 15.209.

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ 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
30-88	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 from 9kHz to 30MHz, the emission level is much less than the limit for more than 20dB. No necessary to take down the record.
- 6. Battery full charged during tests.

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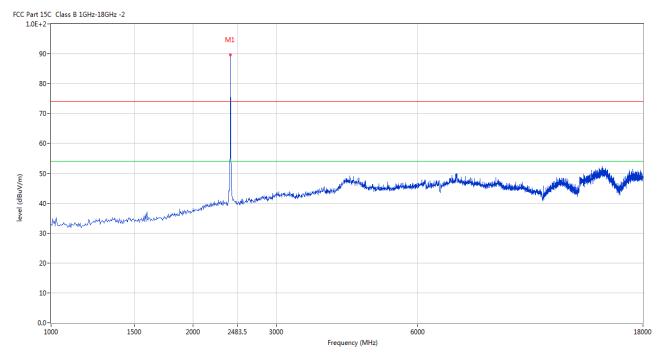


#### 6.5 Test result

## A Fundamental & Harmonics Radiated Emission Data

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

#### Horizontal



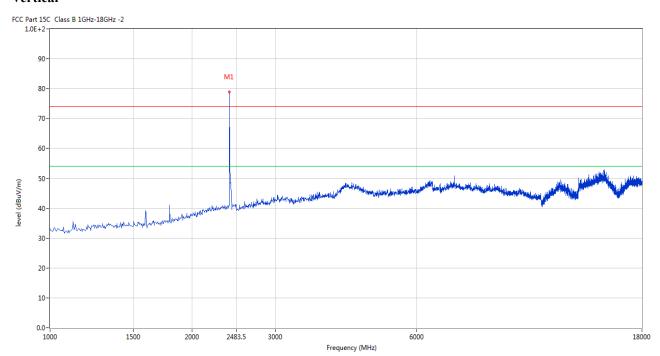
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.010	89.68	-3.57	114.0	-24.32	Peak	252.00	100	Horizontal	Pass

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#### Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.010	78.99	-3.57	114.0	-35.01	Peak	183.00	100	Vertical	Pass

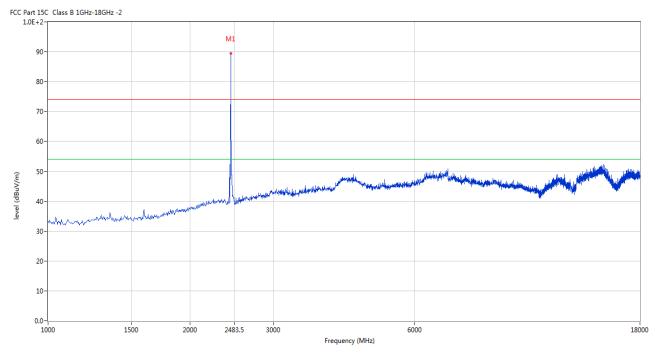
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Please refer to the following test plots for details: Middle Channel-2441MHz

#### Horizontal



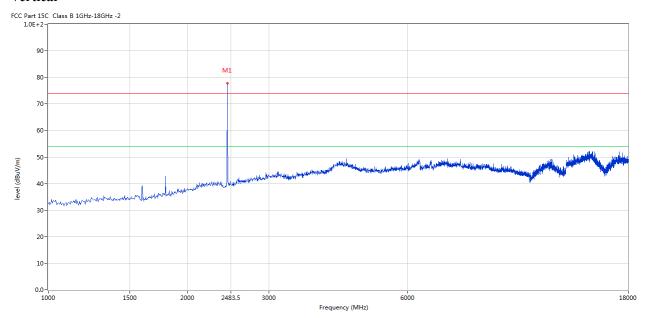
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2441.010	89.42	-3.57	114.0	-24.58	Peak	251.00	100	Horizontal	Pass

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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	2441.010	77.73	-3.57	114.0	-36.27	Peak	198.00	100	Vertical	Pass

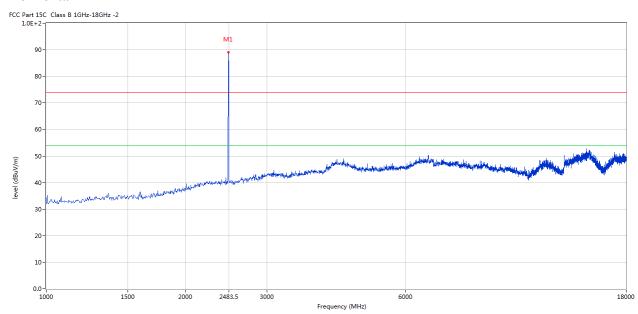
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Please refer to the following test plots for details: High Channel-2480MHz

#### Horizontal



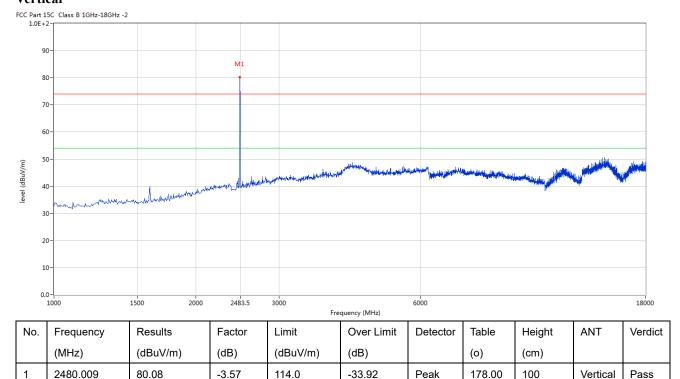
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480.009	89.06	-3.57	114.0	-24.94	Peak	250.00	100	Horizontal	Pass

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#### Vertical



Note: (2) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

- (3) Margin=Emission-Limits
- (4) According to section 15.35(b), the peak limit is 20dB higher than the average limit
- (5) For test purpose, keep EUT continuous transmitting
- (5) For emission above 18GHz and Below 30MHz, It is only the floor noise. No necessary to take down.
- (6) the measured PK value less than the AV limit.

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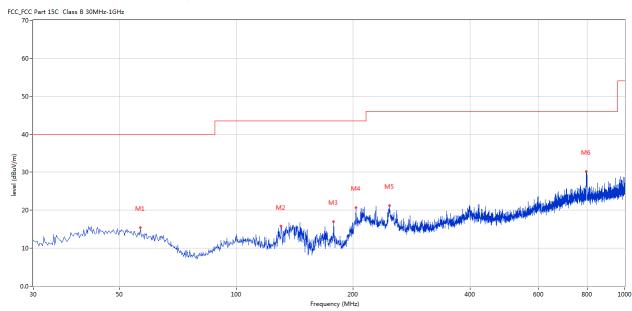


# B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

**Results:** Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	56.668	15.37	-12.22	40.0	-24.63	Peak	135.00	100	Horizontal	Pass
2	130.370	15.76	-16.75	43.5	-27.74	Peak	330.00	100	Horizontal	Pass
3	178.130	16.99	-15.51	43.5	-26.51	Peak	250.00	100	Horizontal	Pass
4	203.102	20.65	-13.44	43.5	-22.85	Peak	276.00	100	Horizontal	Pass
5	248.195	21.21	-12.17	46.0	-24.79	Peak	213.00	100	Horizontal	Pass
6	796.593	30.23	-3.07	46.0	-15.77	Peak	293.00	100	Horizontal	Pass

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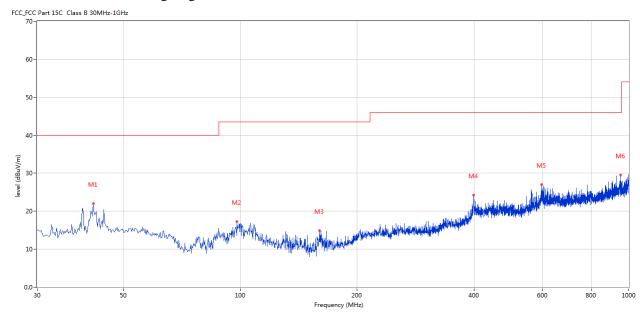


## Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(0)	(cm)		
1	41.880	22.04	-11.72	40.0	-17.96	Peak	286.00	100	Vertical	Pass
2	98.125	17.28	-13.73	43.5	-26.22	Peak	191.00	100	Vertical	Pass
3	159.948	14.96	-16.36	43.5	-28.54	Peak	131.00	100	Vertical	Pass
4	399.235	24.25	-8.60	46.0	-21.75	Peak	221.00	100	Vertical	Pass
5	597.308	27.05	-5.09	46.0	-18.95	Peak	183.00	100	Vertical	Pass
6	953.694	29.53	-1.73	46.0	-16.47	Peak	281.00	100	Vertical	Pass

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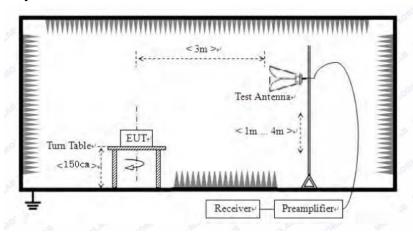


#### 7. Band Edge

#### 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.

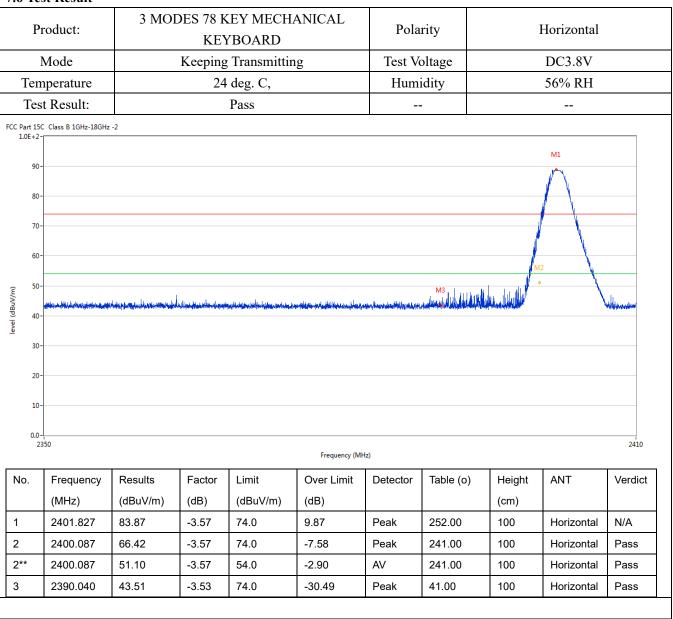
The report refers only to the sample tested and does not apply to the bulk.

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#### 7.6 Test Result

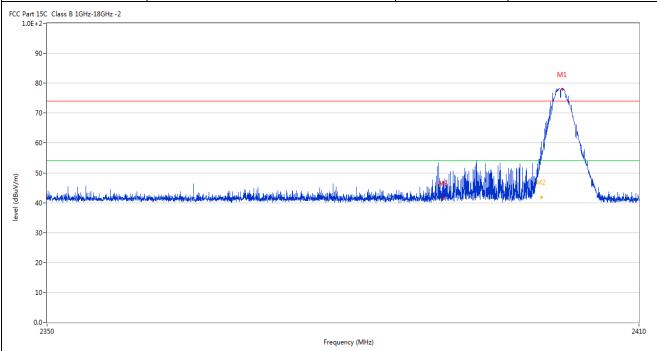


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Product:	3 MODES 78 KEY MECHANICAL KEYBOARD	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.8V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		

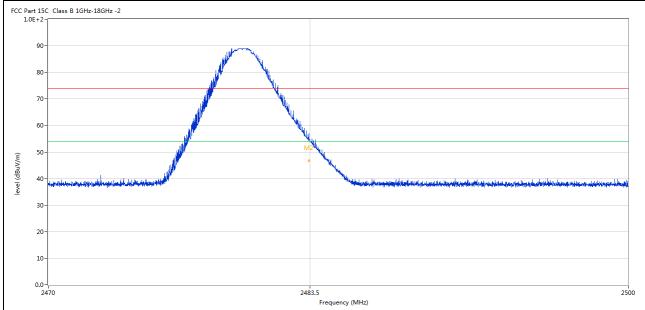


No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.142	78.15	-3.57	74.0	4.15	Peak	202.00	100	Vertical	N/A
2	2400.012	54.99	-3.57	74.0	-19.01	Peak	208.00	100	Vertical	Pass
2**	2400.012	41.76	-3.57	54.0	-12.24	AV	208.00	100	Vertical	Pass
3	2390.025	41.56	-3.53	74.0	-32.44	Peak	1.00	100	Vertical	Pass

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Product:	3 MODES 78 KEY MECHANICAL KEYBOARD	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.8V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2480.250	88.99	-3.57	74.0	14.99	Peak	247.00	100	Horizontal	N/A
2	2483.437	57.00	-3.57	74.0	-17.00	Peak	247.00	100	Horizontal	Pass
2**	2483.437	46.79	-3.57	54.0	-7.21	AV	247.00	100	Horizontal	Pass

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]	Product:	3 MOD	Y MECHAN OARD	ICAL	Detecto	or	Vertical			
	Mode		ransmitting		Test Volta	age	DC3.8V			
Temperature 24 deg. C,						Humidi	ty	56% RH		
Test Result: Pass										
CC Part 1	15C Class B 1GHz-18GHz	-2			<u>'</u>					
8	20-									
(w/ngn)   44	10	itani ita Afrika kata kata kata kata kata kata kata k			d seemed to be independently	hell a god ostaty black	oral (or hide orbit) also	d id an Alass Armens	lot when the light of the state	isto Ase
(m/nngp) Javas 3 2 2 1 0.	10	is well down hill to the party of the first ship he had been been as the contract of the contr		2483.5 Fr	equency (MHz)	hollocades (Carphillia)		d id as describe	lat ale a le di la para di par	2500
(m/nngp) Javas 3 2 2 1 0.	10	Results	Factor			Detector	Table	Height	ANT	
(w/\ngg) away 3 2 1 0.	10		Factor (dB)	Fr	equency (MHz)					2500
(w/\ngg) away 3 2 1 0.	10	Results		Limit	equency (MHz)  Over Limit		Table	Height		2500

Note: The PK emission level less than the AV limit. No necessary to record the AV emission level.

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## 8.0 Antenna Requirement

#### **Applicable Standard**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a PCB antenna with gain -1.85dBi maximum. It fulfills the requirement of this section.

Test Result: Pass

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SK Modulation										
Product: 3 MODES 78 KEY MECHANICAL KEYBOARD					Test Mo	de:	Keep transmitting			
Mode	mitting		Test Volt	age	DC3.8V					
Temperature 24 deg. C,					Humidi	ty	56% RH			
Test Result:		Pass			Detecto	or	PK			
dB Bandwidth		1.311MH	z							
	Marke	er 1 [T1 n	ıdB]	RBW	30 k	Hz RI	7 Att	20 dB		
Ref Lvl	ndB		00 dB	VBW	100 k					
10 dBm	BW	1.310621	24 MHz	SWT	8.5 m	s Ui	nit	dBr	n	
					<b>v</b> <sub>1</sub>	[T1]	_	6.98 dBn	n	
							2.4020	0902 GHz		
0					ndI	3	2	0.00 dB	1	
			~		BW ⊽⊤i	5-13	1.3106		2	
-10			$\sim$	₩_	▼ 'I'	[T1]	2.4014	7.08 dBn 1984 GHz		
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	h	<b>∨</b> <sub>T2</sub>	2 [T1]	-2	7.14 dBn		
-20		/w/			4	\ <sub>\\\\</sub>	2.4027	3046 GHz	1	
1MAX		7 "				T2			11	
-40		V				W.				
-50										
								~~~		
-60								- V		
-70										
-80										
-90	)2 GHz		300					an 3 MHz	_	

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GFSK Modula	ation										
Product:	3 MODES 78 KEY MECHANICAL KEYBOARD					Test Mode:		Keep transmitting			
Mode		Keepin	g Transmi	tting		Test Voltage		;	DC	3.8V	
Temperature		2	4 deg. C,			Humidity			56%	6 RH	
Test Result:			Pass			Detector			PK		
20dB Bandwidth		1.	.160MHz								
Ref Lvl 10 dBm		ndB 20.00 dB			V	BW BW WT	30 k 100 k 8.5 m	Hz			
0				0			▼1 ndE	[T1]	-6 2.44100 20 1.16032	.00 dB 064 MHz	A
-10 -20 1MAX			T)			کر	V <sub>T</sub>	T1] T1]	-26 2.44049 -27 2.44165	198 GHz	1MA
-30		~~						R <sub>1</sub>			
-50	مسمم								J~~~		
-60										\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
-70											
-90											
Center 2.441 GHz 300 kHz/ Span 3 M  Date: 7.MAR.2022 16:41:34										n 3 MHz	

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GFSK Modulat	ion											
Product:	3 MODES 78 KEY MECHANICAL KEYBOARD					Test Mode:			Keep transmitting			
Mode		Keepin	g Transmi	tting		To	est Voltage	;	DC	C3.8V		
Temperature		2	4 deg. C,			]	Humidity		569	% RH		
Test Result:			Pass				Detector		PK			
20dB Bandwidth	1.064MHz											
Ref Lvl	Marker 1 [T1 ndB] ndB 20.00 dB			V	BW BW	30 k 100 k						
10 dBm		BW 1	1.064128	326 MHz	S	WT	8.5 m	s t	Jnit	dBm	1	
0							▼ <sub>1</sub>	[T1]	2.48000	3.92 dBm 902 GHz	A	
-10					M		BW ▼ <sub>T1</sub>	(T1)	1.06412	826 MHz		
-20					* \	ጊ	<b>√</b>	2 [T1]		806 GHz 3.85 dBm 218 GHz		
1MAX -30			T				Ţ	2	2.4003	7210 G112	1MA	
-40			>									
-50		/							V			
-60										\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
MARAMAN												
-70												
-80												
-90 Center 2	.48 GH:	z		300 kHz/					Span 3 MHz			
Date: 7.	.MAR.20	22 16:	37:06									

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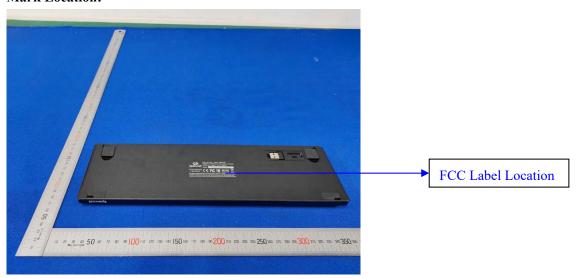
#### 10.0 FCC ID Label

#### FCC ID: TUVET-8652

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### **Mark Location:**



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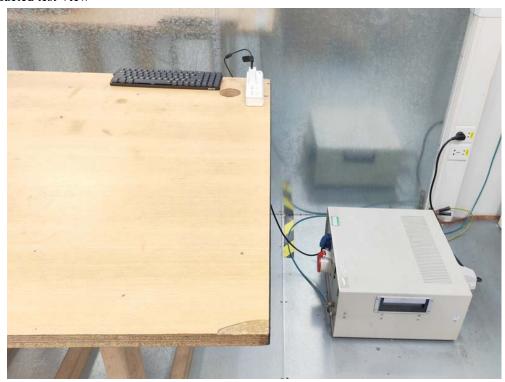
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#### 11.0 Photo of testing

#### 11.1 Conducted test View--



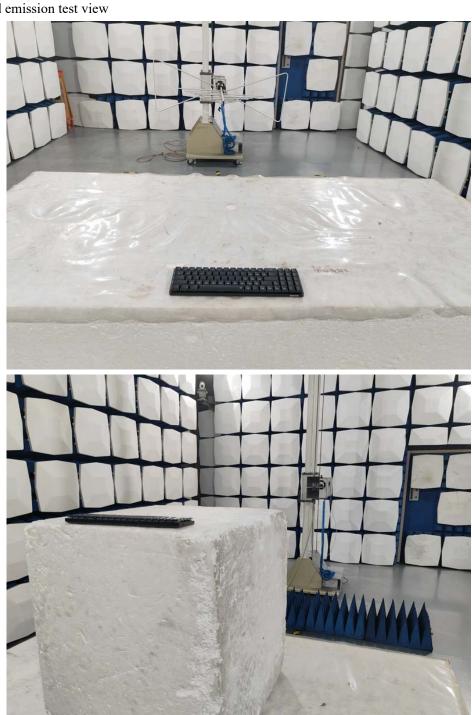
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#### Radiated emission test view



Photographs - EUT

Please refer test report TW2203052-01E

#### --End of the report--

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

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