



Report No.: TW2112183-01E

File reference No.: 2022-04-06

Applicant: Eastern Times Technology Co.,Ltd

Product: MECHANICAL GAMING KEYBOARD

Model No.: K535P-KBS, ET-8497, ET-8512, K535P-KNS, K535P-WNS,

K535P-WBS, K535P-WRS, K535P-KRS

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 long

Terry Tang

Manager

Dated: April 06, 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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Test Report Conclusion

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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.

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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: MECHANICAL GAMING KEYBOARD

Manufacturer: Eastern Times Technology Co.,Ltd

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

Dongguan City, Guangdong, China.

Trademark: REDRAGON Model Number: K535P-KBS

Additional Model Name ET-8497, ET-8512, K535P-KNS, K535P-WNS, K535P-WBS, K535P-WRS,

K535P-KRS

Rating: DC5V, 1000mA or DC3.7V, 200mA Battery DC3.7V, 1900mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2403-2480MHz

Channel Number: 16

Channel List (unit: MHz): 2403, 2424, 2441, 2461, 2414, 2435, 2450, 2470, 2409, 2429, 2455, 2475,

2419, 2445, 2465, 2480

Serial No.: RDK535P-KBS21033000006

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

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1.4 Submitted Sample: 1 Sample

1.5 Test Duration

2021-12-11 to 2022-04-06

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

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	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(a) & 15.249(b) Limit	Field Strength of Fundamental	Pass	Complies
FCC Part 15, Paragraph 15.209 and RSS-210	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies

3.2 Test Standards

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

4.0 EUT Modification

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

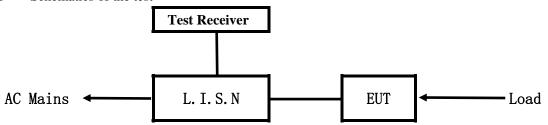
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5. Power Line Conducted Emission Test

5.1 Schematics of the test

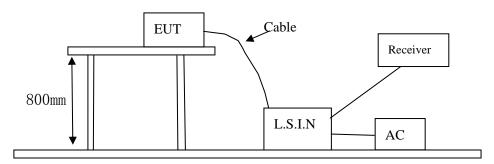


EUT: Equipment Under Test

5.2 Test Method and test Procedure

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

Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2014. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

16 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID
		K535P-KBS, ET-8497,	
MECHANICAL CAMING	Eastern Times Technology	ET-8512, K535P-KNS,	
MECHANICAL GAMING	Eastern Times Technology	K535P-WNS,	TUVET-8497
KEYBOARD	Co.,Ltd	K535P-WBS,	
		K535P-WRS, K535P-KRS	

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B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

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

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2014

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency	Limits (dB µ V)				
(MHz)	Quasi-peak Level	verage evel			
$0.15 \sim 0.50$	66.0~56.0*	56.0~ 6.0*			
$0.50 \sim 5.00$	56.0	46.0			
5.00 ~ 30.00	60.0	50.0			

Notes:

- 1. *Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

5.6 Test Results:

Pass

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

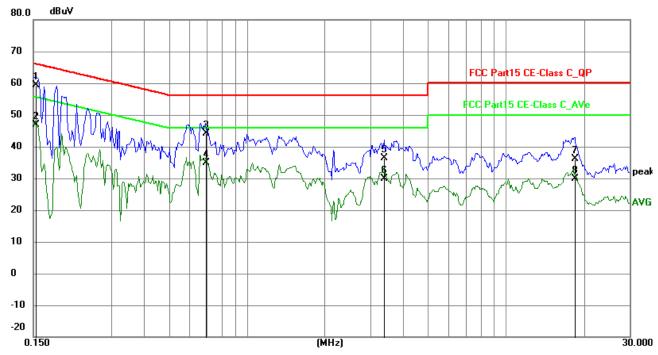
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	49.71	9.78	59.49	65.79	-6.30	QP	Р
2	0.1539	37.18	9.78	46.96	55.79	-8.83	AVG	Р
3	0.6960	34.33	9.78	44.11	56.00	-11.89	QP	Р
4	0.6960	25.02	9.78	34.80	46.00	-11.20	AVG	Р
5	3.3978	26.59	9.86	36.45	56.00	-19.55	QP	Р
6	3.3978	20.10	9.86	29.96	46.00	-16.04	AVG	Р
7	18.4089	25.54	10.58	36.12	60.00	-23.88	QP	Р
8	18.4089	19.31	10.58	29.89	50.00	-20.11	AVG	Р

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

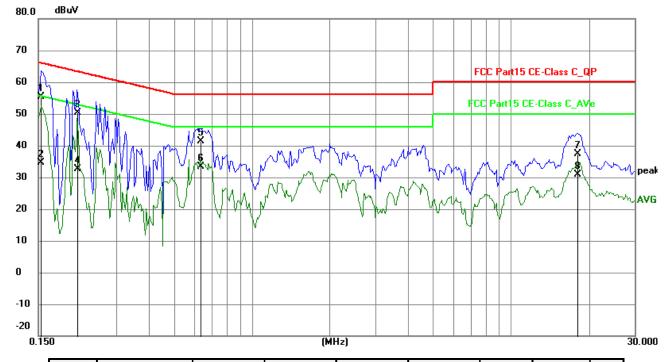
EUT Operating Environment

Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Charging and Keep Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	45.54	9.78	55.32	65.79	-10.47	QP	Р
2	0.1539	24.78	9.78	34.56	55.79	-21.23	AVG	Р
3	0.2124	40.67	9.75	50.42	63.11	-12.69	QP	Р
4	0.2124	22.78	9.75	32.53	53.11	-20.58	AVG	Р
5	0.6336	31.57	9.78	41.35	56.00	-14.65	QP	Р
6	0.6336	23.52	9.78	33.30	46.00	-12.70	AVG	Р
7	17.9837	26.94	10.56	37.50	60.00	-22.50	Q Q	Р
8	17.9837	20.35	10.56	30.91	50.00	-19.09	AVG	Р

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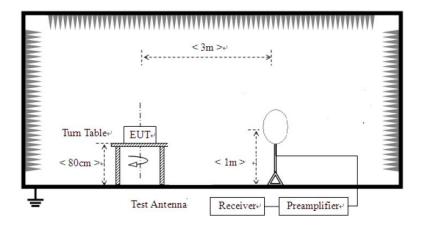


6 Radiated Emission Test

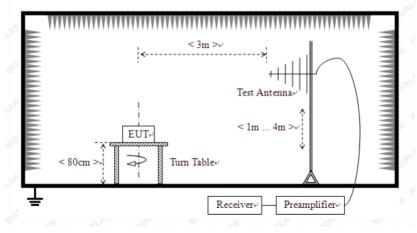
- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size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

Block diagram of Test setup

For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to1GHz



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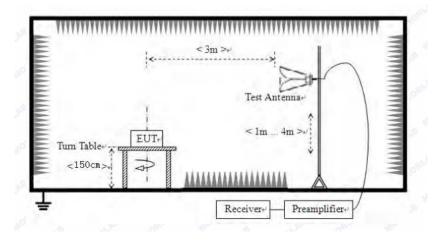
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For radiated emissions above 1GHz



- 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 Strength of Fundamental (3m)			Field Strength of Harmonics (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 $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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.

		3 1
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. 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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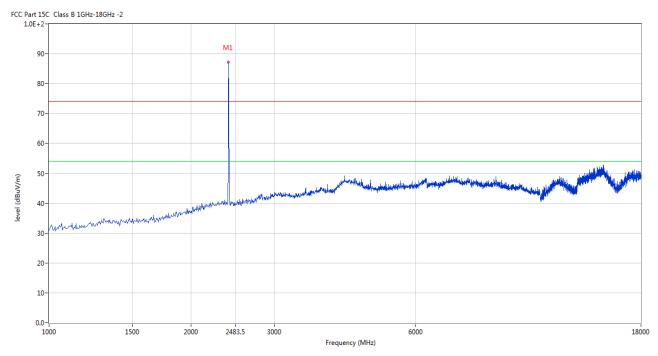


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

Please refer to the following test plots for details: Low Channel-2403MHz

Horizontal



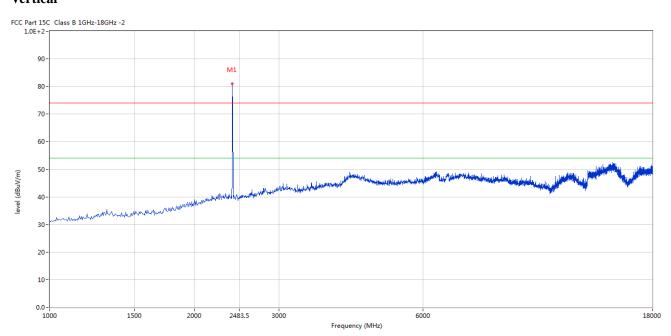
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2403	87.61	-3.57	114.0	-26.39	Peak	264.00	100	Horizontal	Pass

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Vertical



N	. Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2403	81.51	-3.57	114.0	-32.49	Peak	62.00	100	Vertical	Pass

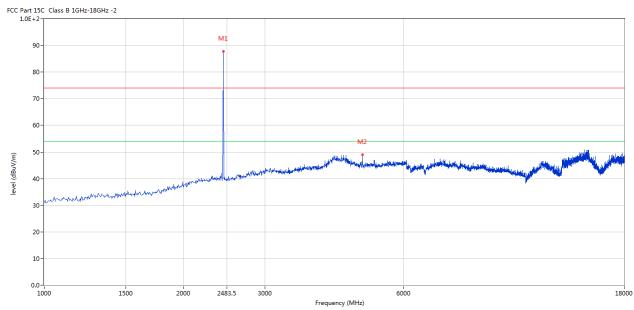
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



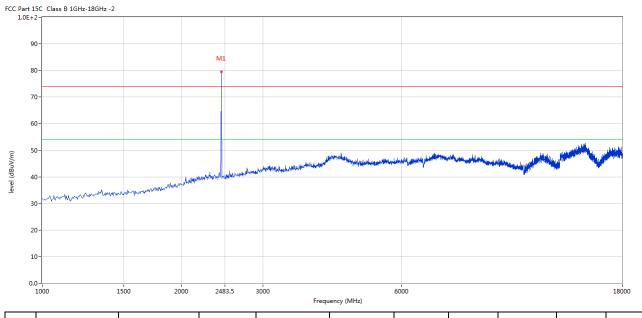
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	87.72	-3.57	114.0	-26.28	Peak	269.00	100	Horizontal	Pass
2	4880.280	48.94	3.20	74.0	-25.06	Peak	264.00	100	Horizontal	Pass

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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	79.49	-3.57	114.0	-34.51	Peak	63.00	100	Vertical	Pass

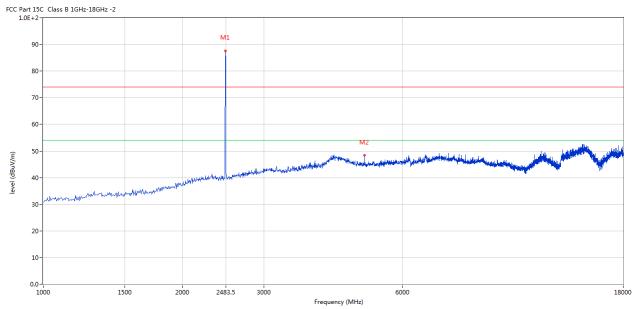
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	87.63	-3.57	114.0	-26.37	Peak	272.00	100	Horizontal	Pass
2	4960.010	48.34	3.36	74.0	-25.66	Peak	272.00	100	Horizontal	Pass

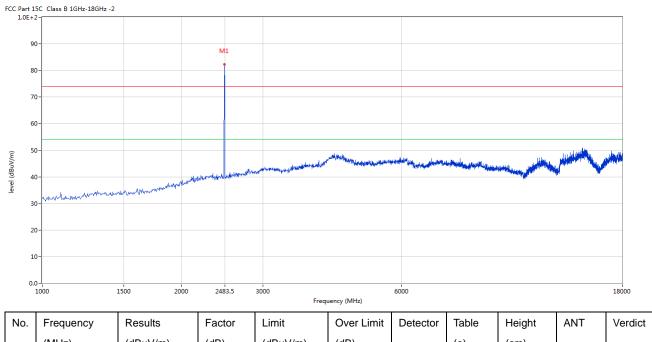
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Vertical



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	82.38	-3.57	114.0	-31.62	Peak	350.00	100	Vertical	Pass

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

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

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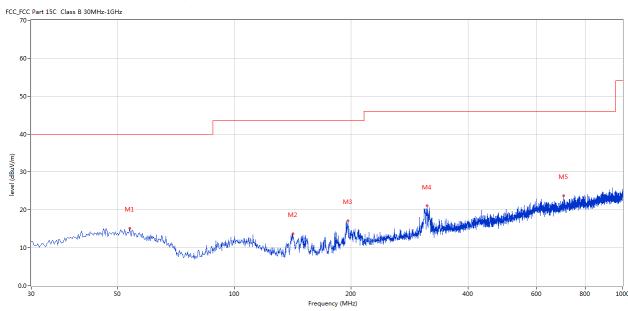


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	53.759	15.19	-11.53	40.0	-24.81	Peak	30.00	100	Horizontal	Pass
2	141.522	13.67	-17.28	43.5	-29.83	Peak	188.00	100	Horizontal	Pass
3	196.313	17.11	-13.59	43.5	-26.39	Peak	113.00	100	Horizontal	Pass
4	313.169	21.03	-10.82	46.0	-24.97	Peak	103.00	100	Horizontal	Pass
5	704.466	23.69	-4.16	46.0	-22.31	Peak	170.00	100	Horizontal	Pass

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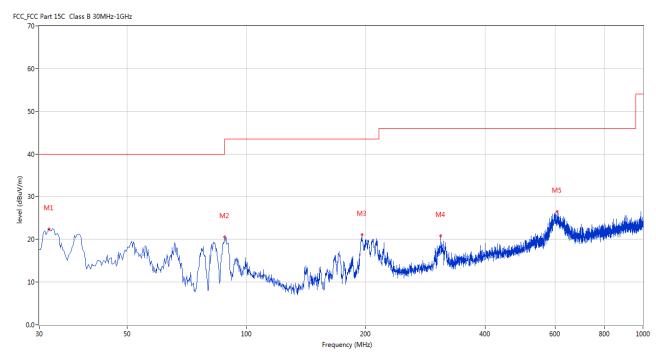


Radiated Emission In Vertical (30MHz----1000MHz)

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	31.455	21.77	-14.57	40.0	-18.23	Peak	360.00	100	Vertical	Pass
2	88.185	20.56	-15.59	43.5	-22.94	Peak	232.00	100	Vertical	Pass
3	195.344	21.06	-13.74	43.5	-22.44	Peak	339.00	100	Vertical	Pass
4	308.805	20.79	-10.85	46.0	-25.21	Peak	309.00	100	Vertical	Pass
5	607.248	26.52	-5.05	46.0	-19.48	Peak	177.00	100	Vertical	Pass

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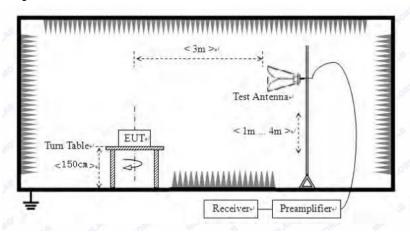


7. Band Edge

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.

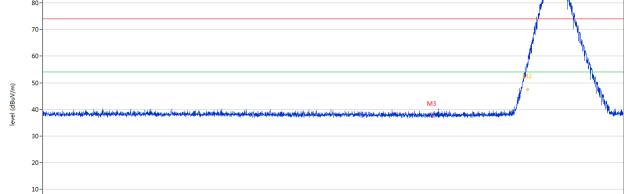
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7.6 Test Result

7.6 Test Result			
Product:	MECHANICAL GAMING KEYBOARD	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		
FCC Part 15C Class B 1GHz-18GHz -2 1.0E+2- 90- 80-			M1



Frequency (MHz) No. Factor Limit Over Limit Table ANT Verdict Frequency Results Detector Height (MHz) (dBuV/m) (dB) (dBuV/m) (dB) (o) (cm) 2403.057 87.45 74.0 270.00 N/A -3.57 13.45 Peak 100 Horizontal 2 2400.027 57.65 -3.57 74.0 -16.35 Peak 264.00 100 Horizontal Pass 2** 2400.027 47.53 -3.57 54.0 -6.47 ΑV 264.00 100 Horizontal Pass 3 2390.070 37.37 -3.53 74.0 -36.63 Peak 240.00 100 Horizontal Pass

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	Product:	MECHANI	CALGAN	IING KEYBO	MPD	Detecto	r	,	Vertical	
-	Mode Mode		Leeping Tra			Test Volta			DC3.7V	
Te	mperature	1,	24 deg			Humidit			66% RH	
	est Result:		Pas				· J			
CC Part 1	15C Class B 1GHz-18GHz	-2	1 43							
1.0E+	2-									
g	00-								M1	
8	0-							<i></i>	APM N	
7	70-									
6	60-									
								М2	_	
evel (dBuV/m)	60-								\	
p) 4	10-	lanik angelingelingeringen in der delimination	والمتارا والمتاولة والمتألف والمتاوية والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك	والمعارف ومراء والمعارف والمعا	أسابط أمدار المنهواة المائد عادا الإدارة	M3 Whatehalle	والإشارة المستعلم المتعالم والمتالية	hapana maraya	*	yandad
	0-									
2	0-									
1	0-									
1				Frequ	uency (MHz)					2410
1	0-	Results	Factor	Frequ Limit	uency (MHz) Over Limit	Detector	Table	Height	ANT	ı
0.	.0-	Results (dBuV/m)	Factor (dB)	-	-	Detector	Table (o)	Height (cm)	ANT	²⁴¹⁰ Verdic
0	Prequency			Limit	Over Limit	Detector Peak			ANT Vertical	ı
0 No.	Frequency (MHz)	(dBuV/m)	(dB)	Limit (dBuV/m)	Over Limit (dB)		(o)	(cm)		Verdic

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Pro	oduct:	MECHA	ANICAL (GAMING K	EYBOARD		Polarity	y	Horizon	tal
N	Mode		Keeping	g Transmittii	ıg	-	Test Volta	age	DC3.7	V
Tem	perature		24	4 deg. C,			Humidit	ty	56% R	Н
Test	t Result:			Pass						
CC Part 15C 1.0E+2-	Class B 1GHz-18GHz	-2								
90-										
80-			MAMM	THAT .						
			/	1/1/1						
70-			A STATE OF THE STA	7						
60-				1						
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30- 20- 10- 247		Results	Factor			Detector	Table	Height	ANT	
30- 20- 10- 247	70		Factor (dB)	T	Frequency (MHz)					2500
30- 20- 10- 247	₇₀ Frequency	Results		Limit	Frequency (MHz) Over Limit		Table	Height		2500
30 - 20 - 10 - 247 No. 1	⁷⁰ Frequency (MHz)	Results (dBuV/m)	(dB)	Limit (dBuV/m)	Frequency (MHz) Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	2500 Verdi

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]	Product:	MECI	HANICAL	GAMING K	EYBOARD		Detecto	r	Vertica	ıl
	Mode		Keepir	ng Transmittir	ng	-	Test Volta	ige	DC3.7	V
Te	mperature		2	24 deg. C,			Humidit	у	56% R	Н
Te	est Result:			Pass						
C Part 1 1.0E+	L5C Class B 1GHz-18GHz 2-	-2								
9	0-									
8	0-			Wh.						
			-/-	*\h_\						
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. 4 3 2		Results	Factor			Detector	Table	Height	ANT	2500
. 4 3 2 1	0- 0- 0- 0- 0- 2470		Factor (dB)	Fre	quency (MHz)					2500
. 4 3 2 1	0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0	Results		Limit	quency (MHz) Over Limit		Table	Height		
4 3 2 1 0.	o- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0-	Results (dBuV/m)	(dB)	Limit (dBuV/m)	quency (MHz) Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	2500 Verdic

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 -1.85dBi Max. It fulfills the requirement of this section. Test Result: Pass

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Product: MECHANICAL			GAMING KEYBOARD			Test Mode:		Keep transmitting			
Mode		Keeping Transmitting				Test Voltage			DC3.7V		
Temperature		24 deg. C,				Humidity		56% RH			
Test Result:		Pass				Detector			PK		
OdB Bandwidth		2.505MHz									
^		Marker	1 [T1 r	ndB]	R.	BW	100 k	Hz Ri	F Att	20 dB	
Ref Lvl		ndB	20.	00 dB	V	BW	300 k	Hz			
10 dBm		BW :	2.505010	002 MHz	S	TW	5 m	s Ui	nit	dBm	ı
10							v ₁	[T1]	- 3	.29 dBm]
									2.40238	377 GHz	
0			1				ndB		20	.00 dB	
					$ \rangle \sim$		\bigwedge ∇_{T1}		2.50501		
-10			/ /		<i>\\</i>	~~	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	[T1]	2.40166	.26 dBm 232 GHz	
			\nearrow	7			∇_{T}	[T1]	-23		
-20		11/						<u> </u>	2.40416	733 GHz	
1MAX								Y			11
-30											
	~~/							V	www.		
-40										MA	
-50											
-60											
-70											
-80											
-90											
Center 2	.403 G	Hz		500	kHz/				Spa	n 5 MHz	

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Product:	MECHANICAL	ARD	Test Mode	:	Keep transmitting			
Mode	Keepin		Test Voltag	e	DC3.7V			
Temperature 24 deg. C,				Humidity		56% RH		
Test Result:	Test Result: Pass			Detector		PK		
20dB Bandwidth	2.244MHz							
Ŕ	Marker	1 [T1 ndB]	RI	BW 100]	kHz RI	7 Att	20 dB	
Ref Lvl	ndB	20.00 dB		BW 300]				
10 dBm	BW :	2.24448898 MHz	SV	WT 5 r	ns Ui	nit	dBm	
				v ₁	[T1]	-2	.71 dBm	A
0			7			2.44101	503 GHz	
				nd BW	B	20 2.24448	.00 dB 898 MHz	
-10				Mc V T		-22 -22	.81 dBm	
-10			W	1.		2.43987	275 GHz	
-20	m/			$ abla_{ m T}$	[T1]	-22	.84 dBm	
1MAX	7				₩	2.44211	723 GHz	1MA
20	/				\ <u>.</u>			
-30	- marci					, M		
/	MM				~W	My Mary		
-40							V	
Jun							.4VIII	
-50								
-60								
-70								
-80								
-90 Center 2	.441 GHz	500	kHz/			Spa	n 5 MHz	
Date: 28.MAR.2022 19:56:00								
Date. Zo	J. PAR. 2022 13							

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Product:	MECHANICAL	Test Mod	e:	Keep transmitting					
Mode	Keepin		Test Volta	ge	DC3.7V				
Temperature	Temperature 24 deg. C,			Humidit	y	56% RH			
Test Result:	Test Result: Pass			Detecto	r	PK			
20dB Bandwidth	2.275MHz								
Ŕ.	Marker	1 [T1 ndB]	RI	BW 100	kHz R	F Att	20 dB		
Ref Lvl	ndB	20.00 dB			kHz				
10 dBm	BW 2	2.27454910 MHz	SI	WT 5	ms U	nit	dBm		
				•	1 [T1]	-2	.60 dBm	Α	
0		1				2.47938	377 GHz		
		, ,	\	n B		2.27454	.00 dB 910 MHz		
-10				~~~~~		-22	.54 dBm		
-10		\sim	\bigvee			2.47887	275 GHz		
20	77.			ightharpoons	T [T1]	-23	.55 dBm		
-20 1MAX	7				T2 V.	2.48114	729 GHz	1MA	
20					1				
-30	my mm				W.	W www	\		
-40						<u> </u>	M		
Market							MANA		
-50									
-60									
-70									
-80									
-90	40 011-	500	1=11 /			G	. F. MII		
	Center 2.48 GHz 500 kHz/ Span 5 MHz								
Date: 28	8.MAR.2022 19	:57:38							

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10.0 FCC ID Label

FCC ID: TUVET-8497

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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11.0 Photo of testing

11.1 Conducted test View--

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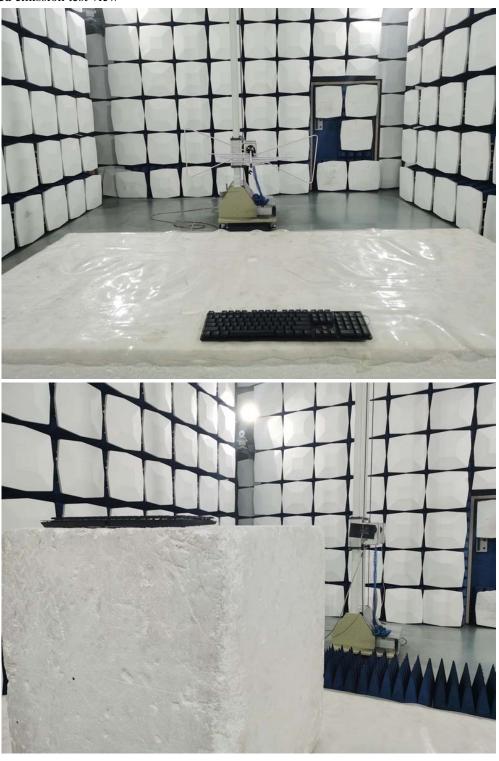
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Radiated emission test view



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

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11.2 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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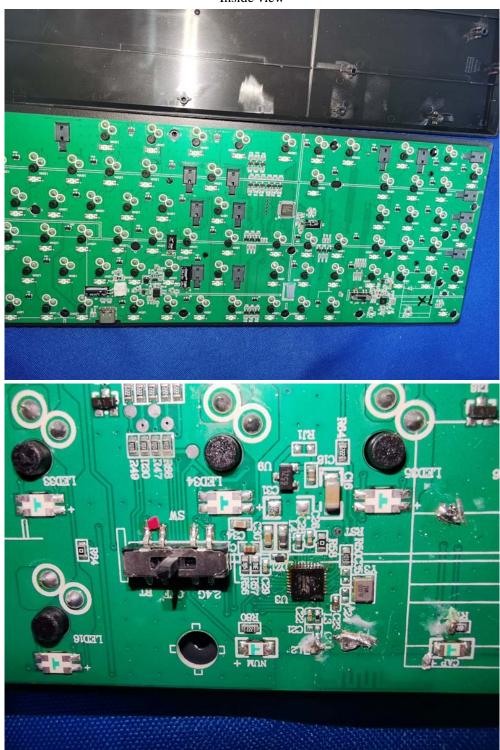
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Inside view



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Inside view



-- End of the report--

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