



File reference No.: 2021-12-31

Applicant: Eastern Times Technology Co.,Ltd

Product: MECHANICAL GAMING KEYBOARD

Model No.: K621-RGB, K621W-RGB, ET-8541

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

Jack Chung

Jack Chung

Manager

Dated: December 31, 2021

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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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: K621-RGB

Additional Model Name K621W-RGB, ET-8541

Rating: DC3.7V, 260mA or DC5V, 660mA 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.: RDK621-RGB21063002011

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

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1.4 Submitted Sample: 1 pc

1.5 Test Duration

2021-12-11 to 2021-12-31

1.6 Test Uncertainty

Conducted Emissions Uncertainty = 3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty = 5%

Conducted Emissions Uncertainty = 3.6dB

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

Terry Tang

The sample tested by

Print Name: Terry Tang

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	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	2021-01-16	2022-01-15
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	2021-01-06	2022-01-05

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 teste	d 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

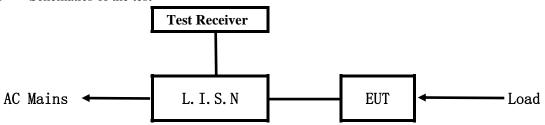
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

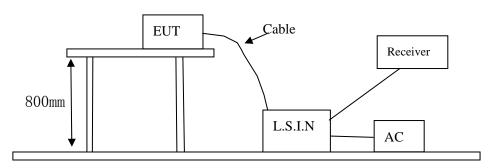


EUT: Equipment Under Test

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 500hm/50uH as specified by section 5.1 of ANSI C63.4 -2014.

Test Voltage: 120V~, 60Hz 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.

A. EUT

De	evice	Manufacturer	Model	FCC ID
MECHANICAL GAMING KEYBOARD	Eastern Times Technology Co.,Ltd	K621-RGB, K621W-RGB,	TUVET-8541	
		ET-8541		

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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

8 81						
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 ~ 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)

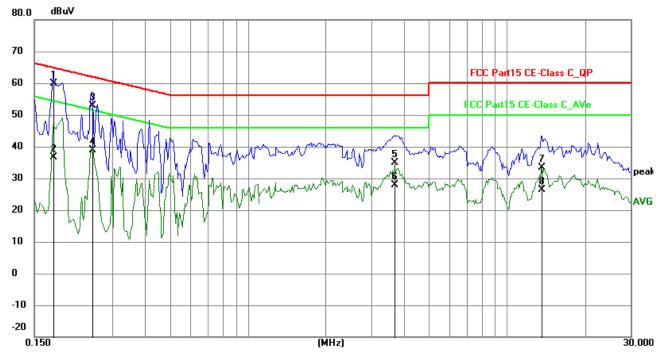
EUT Operating Environment

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	0.1773	50.04	9.77	59.81	64.61	-4.80	QP	Р
2	0.1773	26.85	9.77	36.62	54.61	-17.99	AVG	Р
3	0.2514	43.08	9.75	52.83	61.71	-8.88	QP	Р
4	0.2514	29.05	9.75	38.80	51.71	-12.91	AVG	Р
5	3.6864	25.06	9.87	34.93	56.00	-21.07	QP	Р
6	3.6864	18.13	9.87	28.00	46.00	-18.00	AVG	Р
7	13.6197	23.15	10.32	33.47	60.00	-26.53	QP	Р
8	13.6197	16.11	10.32	26.43	50.00	-23.57	AVG	Р

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

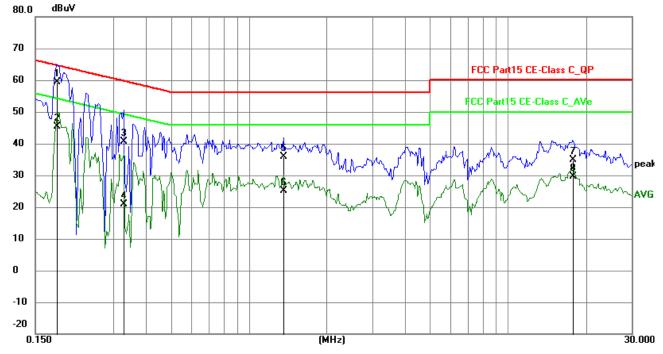
EUT Operating Environment

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	0.1812	49.53	9.76	59.29	64.43	-5.14	QP	Р
2	0.1812	35.66	9.76	45.42	54.43	-9.01	AVG	Р
3	0.3294	30.83	9.76	40.59	59.47	-18.88	QP	Р
4	0.3294	11.15	9.76	20.91	49.47	-28.56	AVG	Р
5	1.3629	26.01	9.79	35.80	56.00	-20.20	QP	Р
6	1.3629	15.38	9.79	25.17	46.00	-20.83	AVG	Р
7	17.8083	24.43	10.55	34.98	60.00	-25.02	QP	Р
8	17.8083	19.19	10.55	29.74	50.00	-20.26	AVG	Р

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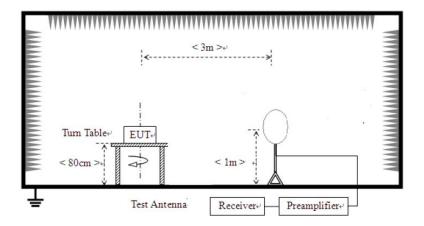


6 Radiated Emission Test

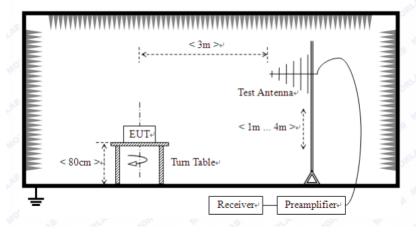
- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189
- (2) The EUT, peripherals were put on the turntable which table size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



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

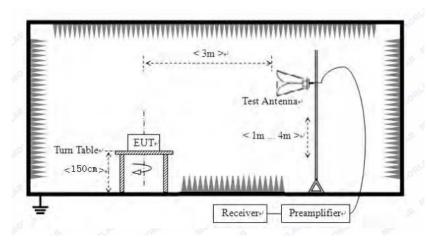
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For radiated emissions above 1GHz



- 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 S	trength of Harmo	onics (3m)
(MHz)	mV/m	dBu	V/m	uV/m	dBu	V/m
2400-2483.5	50	94 (Average)	114 (Peak)	500	54 (Average)	74 (Peak)

Note:

- 1. RF Field Strength $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 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)
0.009-0.049	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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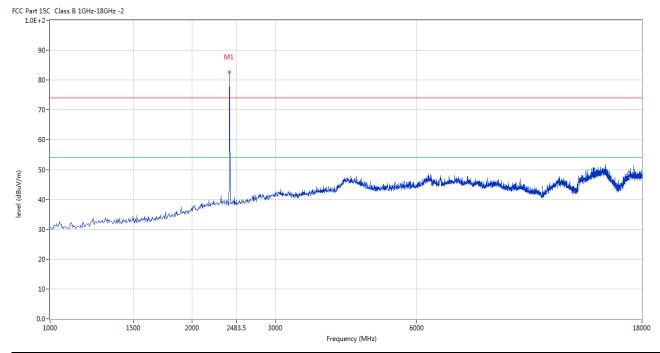


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



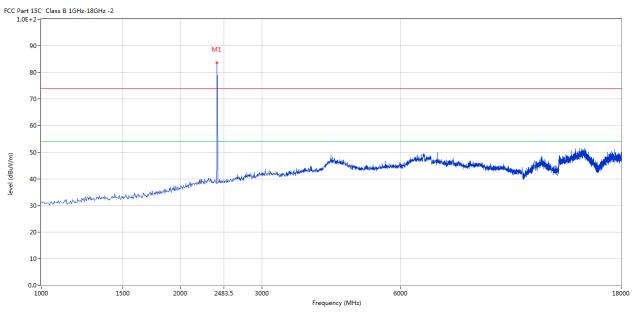
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table (o)	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)			(cm)		
1	2402.853	82.73	-3.57	114.0	-31.27	Peak	309.00	100	Horizontal	Pass

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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	2402.853	83.63	-3.57	114.0	-30.37	Peak	321.00	100	Vertical	Pass

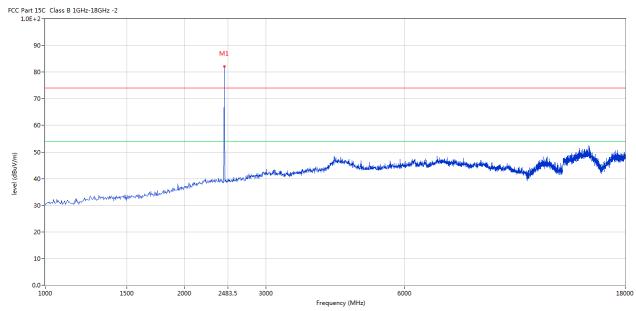
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



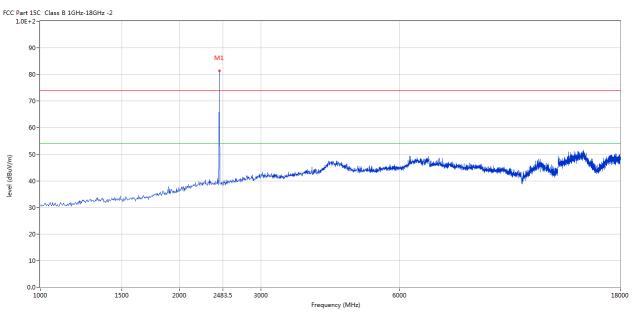
No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2440.390	82.07	-3.57	114.0	-31.93	Peak	315.00	100	Horizontal	Pass

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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	2440.390	81.32	-3.57	114.0	-32.68	Peak	324.00	100	Vertical	Pass

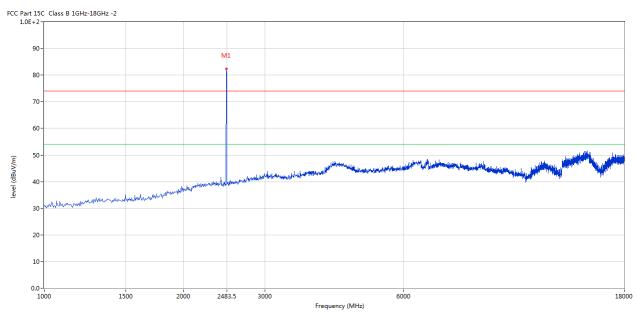
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



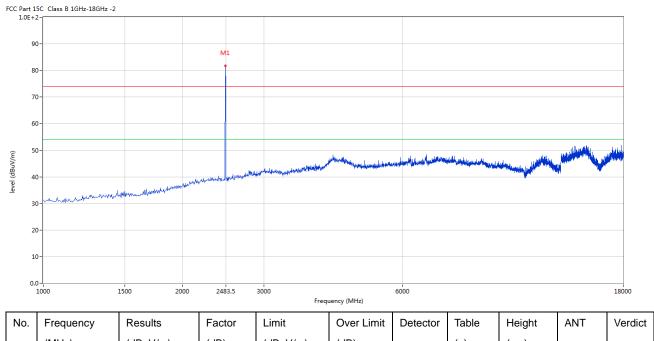
ı	No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
	1	2479.630	82.39	-3.57	114.0	-31.61	Peak	227.00	100	Horizontal	Pass

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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	2479.630	81.69	-3.57	114.0	-32.31	Peak	332.00	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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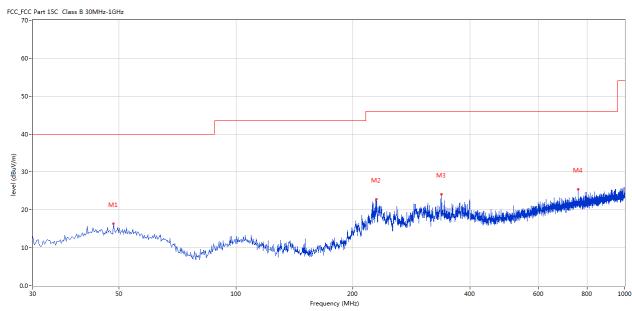


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	48.425	16.34	-11.22	40.0	-23.66	Peak	248.00	100	Horizontal	Pass
2	229.770	22.81	-12.68	46.0	-23.19	Peak	347.00	100	Horizontal	Pass
3	337.413	24.08	-9.83	46.0	-21.92	Peak	284.00	100	Horizontal	Pass
4	759.015	25.40	-3.25	46.0	-20.60	Peak	257.00	100	Horizontal	Pass

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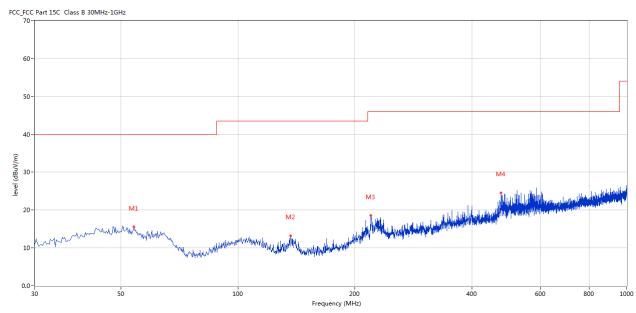


Radiated Emission In Vertical (30MHz----1000MHz)

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)		(o)	(cm)		
1	54.001	15.50	-11.54	40.0	-24.50	Peak	58.00	100	Vertical	Pass
2	136.431	13.24	-17.16	43.5	-30.26	Peak	13.00	100	Vertical	Pass
3	219.830	18.53	-13.32	46.0	-27.47	Peak	317.00	100	Vertical	Pass
4	474.391	24.47	-7.38	46.0	-21.53	Peak	13.00	100	Vertical	Pass

Date: 2021-12-31

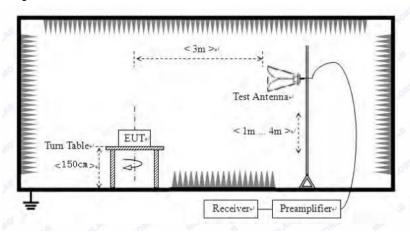


7. Band Edge

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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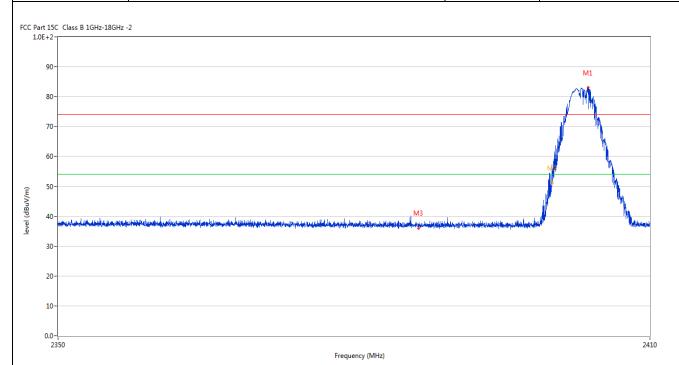
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7.6 Test Result

Product:	MECHANICAL GAMING KEYBOARD	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass		



No. Frequency Results Factor Limit Over Limit Detector Table (o) Height ANT Verdict (dBuV/m) (dBuV/m) (MHz) (dB) (dB) (cm) 2 2400.027 57.53 74.0 -16.47 Peak 71.00 100 Pass -3.57 Horizontal 2** 2400.027 51.14 -3.57 54.0 -2.86 ΑV 71.00 100 Horizontal Pass 3 2390.025 35.97 -3.53 74.0 -38.03 Peak 67.00 100 Horizontal Pass

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]	Product:	MECH	HANICAL	GAMING K	EYBOARD)	Detecto	or	Vertica	ıl
	Mode		Keepii	ng Transmitti	ng		Test Volt	age	DC3.7	V
Te	mperature		2	24 deg. C,			Humidi	ty	56% R	Н
Те	st Result:			Pass						
CC Part 1 1.0E+	5C Class B 1GHz-18GHz -2	2								
9	0-							Mi		
8	0-							-		
7	0-								1	
6	0-									
								IVI2		
(m//wg	0-							J -	N.	
(m/\ngp) leve		والمتعارب المتعارب أما والمتعارب المتعارب أوالمتعارب المتعارب المت	cantillador combatação do cinh	والمتعارض والمراجع والمتعارض والمتعا	وزواجه المتعادية والمتعادية والمتعادية والمتعادية	M3	والإداعة إرسادة إلى والإدارة الإدارة المادة الم	Annual Marian	1	Nijara, y
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level (dBuV/m	D-	isste mobily fear with law brish as the sich ha	usettakonaskajakoinis	sides of capital de infraequency described	lare, dree, dree, dree with the constitution of the constitution o	M3	ntraticularicans heave, departie	in control of	***************************************	********
E/∧ngp) level (dBu√y) 3	D - Makesian I was in a san an an Indian in a san an an Indian in a san an an Indian in a san an a	assa malifiquensitlelishania aasa-sikha	enedddd y en ar befallof ei einig	રામેક તમે કહારામાં મેક સેલેલ્સ્ટ ફ્રેસ્ટલ્સ માનો <mark>મહત્વનો લે</mark> લ	daga daga makan mengelapan daga daga daga daga daga daga daga da	M3	nterheligischen geschaft der der Antie	received No.	M	**********
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ق/Angp) 4 4 3 3 2 2 1 0.	0 - Managasa I, ang a ana ant da sipilanda da ana	assamentificanistificanismi esta esta esta esta esta esta esta esta	ener Willele – en en beske der beske b			M3	iri disureng, on lu ora, durini	turil .		2410
版/(\ngp) ava 3 2 1 0.	0- 			Frec	quency (MHz)	n dan dan julia da j	Toble	Hoight	ANIT	ī
ق/Angp) 4 4 3 3 2 2 1 0.	Frequency	Results	Factor	Free	quency (MHz) Over Limit	M3 Detector	Table	Height	ANT	Ī
ш/(ngp) јама 3 2 1 1 0.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	quency (MHz) Over Limit (dB)	Detector	(o)	(cm)		Verdic
# 4 3 3 2 1 1 0.	Frequency (MHz)	Results (dBuV/m) 54.25	Factor (dB)	Limit (dBuV/m) 74.0	Over Limit (dB) -19.75	Detector Peak	(o) 1.00	(cm)	Vertical	Verdic
ш/(ngp) јама 3 2 1 1 0.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	quency (MHz) Over Limit (dB)	Detector	(o)	(cm)		Verdic

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P	Product:	M	MECHANICAL GAMING KEYBOARD					arity	Horizo	ntal
	Mode		Keeping Transmitting					/oltage	DC3.	7V
Ter	mperature			24 deg	. C,		Hun	nidity	56% I	RH
Tes	st Result:			Pass	S		-			
	5C Class B 1GHz-18GHz	: -2								
1.0E+2	?-									
90)-									
80)-		/	- HYMAN						
			-+	- ""						
70)-			***************************************						
60	50-									
50	50-									
(m//mgp) level	·				•					
<u>u</u> 40	المراجعة المستخطعة المستخطعة	in a shada da a sa shada calada da sa			Morrow	Haria Mayayayda.	-	i prije prije prije prije.		ha military and a little of the
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30		The state of the s								
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30 20)-									
30)-									
30 20 10 0.0)-				2483.5					25
30 20 10 0.0)-				2483.5 Frequency (M	Hz)				25
30 20 10 0.0)-	Results	Factor	Limit		Hz) Detector	Table (o)	Height	ANT	25 Verdi
200 100 0.00)-		Factor (dB)	Limit (dBuV/m)	Frequency (M	I	Table (o)	Height (cm)	ANT	Г
200 100 0.00	Frequency	Results			Over Limit	I	Table (o) 232.00	_	ANT Horizontal	Г

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Р	roduct:	1	MECHA!	NICAL GA	MING KEY	BOARD		Detector	1	Vertical	
	Mode			Keeping To	ransmitting		-	Test Volta		C3.7V	
Ten	nperature		24 deg. C,						5	6% RH	
Tes	st Result:			Pa	iss						
C Part 150 1.0E+2-	C Class B 1GHz-18GHz	: -2									
90-											
				n. h.b. w.b							
80-				- AND MANAGED -							
70-				- W							
60-			_/_	"	\						
00-			- "		TIME IN COLUMN TO THE COLUMN T						
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50- 40-	herp-of-laggid-laggid-laggid-scale-s	(tark-representation) to the training by the depth of the contraction			Market Ma	ologi alep de Allisanogli direchi, i	mark night and ar in a state of the state of	illerrijeskik-viju mitropicas, vijetva	dada, Manifesid diliplas a positi a para are da securi	9].s.j.ph-dride,with 1948 and as	
50	herp-of-laggid-laggid-laggid-scale-s	elania majamana (1881) este indicativa de la construir de la construir de la construir de la construir de la c			- Barbara Barbara Barbara	مانية بالإسلام الإسارة والمراد	nemoningles agles on a surface features for the second	ellerigischen der erstengen zu siederen	dakudingad kilikungan pelasan	alanderia esta de la constante	
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50· 40· 30·	tory of the pool health of the softwice between the	ense agramações seise independente de la constitución de la constitución de la constitución de la constitución			A DO THE STATE OF	તાંતું. તેવા તેવા તેવા કર્યા હતા હતા છે.	nativo agrico qui con continuo de la continuo de l	elkoodijaakdooojereesteeperaasi eepera	ક્રિક્કોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિંગ ક્લિકોન્સિ	oloopheide sakkeere fun	
50· 40· 30· 20· 10·	ings, give have be included in the first hand have been been been been been been been be	elanda majamani 1980 terdekan da pendarah				متهار بالإستان ويستهاد عندر أبر	स्थानका स्थापना स्थापन	elonospaddowsjerenskepen	ઇન્ડર-એ-મુંગર્ન રેફિર-ાન્ક્રમાં, કૃતિ, કર્યા કેડ્સાન		
50· 40· 30· 20· 10·	ings stranged hashes the insulation of the second	elente varrantiata protection de la constitución de la constitución de la constitución de la constitución de l			2483.5 Frequency (MI		and the state of t	elkoolijakkoolija eerkooper vaa viigeva	the house of the contract of t	2500	
30- 20- 10-	ings, give have be included in the first hand have been been been been been been been be	Results	Factor	Limit	2483.5		Table (o)	Height	ANT		
50- 40- 30- 20- 10- 0.0- 24	top of the state o		Factor (dB)	Limit (dBuV/m)	2483.5 Frequency (MI	tz)				2500	
30- 20- 10- 22-	470 Frequency	Results			2483.5 Frequency (MI	tz)		Height		2500	

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					T	est Mode:	Keep transmitting			
Mode	Keeping Transmitting					Test Voltage Humidity		DC3.7V 56% RH			
Temperature	24 deg. C,										
Test Result:			Pass		Detector PK			ζ			
0dB Bandwidth		2	2.565MHz								
	Marker 1 [T1 ndB]				R	BW	100 k	Iz RF Att 20 d		20 dB	lB
Ref Lvl		ndB	20.	00 dB	V	BW	300 k	Hz			
10 dBm		BW 2	2.565130)26 MHz	S	WT	5 m	s Ur	nit	dBm	n
10							\mathbf{v}_1	[T1]	-11	.50 dBm	
									2.40241	383 GHz	2
0							ndB	i	20	.00 dB	1
			1				BW ∇ _T 1	F 3	2.56513		
-10			X		\sim		Y T1	[T1]	-31 2.40163	.30 dBm 226 GHz	1
			/ \	/ \/	\		$\bigwedge_{\mathbf{T}_{\mathbf{T}}} \nabla_{\mathbf{T}_{\mathbf{T}}}$	(T1)		.75 dBm	
-20						NΥ			2.40419	739 GHz	
1MAX								\			11
-30		T1 M						WLZ			
40	مهمهالسالمسمم	مر									
-40								W	wwwww	Juny has	
-50											
-60											1
-70											1
-80											
-90											
Center 2	.403 G	Hz		500	kHz/				Spa	n 5 MHz	

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Mode Keeping Transmitting Test Voltage DC3.7V Temperature 24 deg. C,	Product:	MECHANICAL GAMING KEYBO	ARD Test Mode:	Keep transmitting
Test Result: Pass Detector PK 20dB Bandwidth 2.525MHz Marker 1 [T1 ndB] RBW 100 kHz RF Att 20 dB Ref Lvl ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.52505010 MHz SWT 5 ms Unit dBm 10	Mode	Keeping Transmitting	Test Voltage	DC3.7V
20dB Bandwidth	Temperature	24 deg. C,	Humidity	56% RH
Marker 1 [T1 ndB] RBW 100 kHz RF Att 20 dB ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.52505010 MHz SWT 5 ms Unit dBm 2.44042385 GHz 2.44042385 GHz 2.52505010 MHz 7T [T1] -5.93 dBm 2.52505010 MHz 7T [T1] -25.99 dBm 2.52505010 MHz 7T [T1] -25.99 dBm 2.44220741 GHz 1MAX -30 1MAX -30 1MAX -30 1MAX -30 1MAX	Test Result:	Pass	Detector	PK
Ref Lv1 ndB 20.00 dB VBW 300 kHz 10 dBm BW 2.52505010 MHz SWT 5 ms Unit dBm V1 [T1] -5.93 dBm 2.44042385 GHz 10 ndB 20.00 dB BW 2.52505010 MHz VT [T1] -25.99 dBm 2.43968236 GHz -20 1MAX -30 dBm 2.44220741 GHz 1MAX -30 -40 -50 dBm 2.44220741 GHz	20dB Bandwidth	2.525MHz		
10 dBm BW 2.52505010 MHz SWT 5 ms Unit dBm 10	Ref Lvl			
T1 [T1] -5.93 dBm A 2.44042385 GHz 1	•			
2.44042385 GHz nds 21.00 dB BW 2.52505010 MHz 7T [T1] -23.99 dBr 2.43968236 GHz -20 1MAX -30 -40 -50	10		▼ 1 [F	r11 _0 02 dpm
-10 -10 -10 -10 -10 -10 -10 -10 -10 -10			1 [.	A
-10 -25, 99 dBm 2.43968236 GHz -30, 00 dBm 2.44220741 GHz -30 -40 -50	0		ndB	20.00 dB
-20 1MAX -30 -40 -50		1		
-20 1MAX -30 -40 -50	-10		V _{T1}	
1MAX			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
-30 -40 -50				
-40 -50		T1	\ \ \	T2
-50 Why wh		A production of the same of th		
	l W			, , , , , , , , , , , , , , , , , , ,
-60	-50			
	-60			
-70	-70			
-80	-80			
-90	·			
Center 2.441 GHz 500 kHz/ Span 5 MHz Date: 29.DEC.2021 10:32:19			kHz/	Span 5 MHz

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Product:	MECHANICAL	GAMING KEYBO	ARD	Т	est Mode:		Keep tra	nsmitting	
Mode	Keeping Transmitting				Test Voltage		DC3.7V		
Temperature	2	4 deg. C,			Humidity		56% RH		
Test Result:		Pass			Detector		I	PK	
20dB Bandwidth	2	.345MHz							
i ka	Marker	1 [T1 ndB]	F	RBW	100 kH	z Rl	F Att	20 dB	
Ref Lvl	ndB	20.00 dB		/BW	300 kH		3		
10 dBm	BW 2	2.34468938 MHz	5	TW	5 ms	Uı	nit	dBm	
10					▼ 1 [[T1]	- 9	.28 dBm	A
							2.47942	385 GHz	n
0					ndB		20	.00 dB	
		1			BW ▼ _{T1}	[T1]	2.34468	938 MHz	
-10		\wedge	1		\wedge	1111	2.47884		
			\\\\	~		[T1]	-29	.07 dBm	
-20		N V			lay		2.48118	737 GHz	120
1MAX	T1	<i></i>			\	T2			1MA
-30						\			
	Jr.								
-40						W.	mul m	~	
- munha								Mun	
-50									
-60									
-70									
-80									
-90								_	
Center 2			kHz/				Spa	n 5 MHz	
Date: 29	9.DEC.2021 10):33:59							

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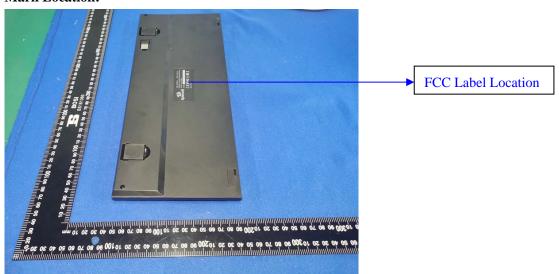
10.0 FCC ID Label

FCC ID: TUVET-8541

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:



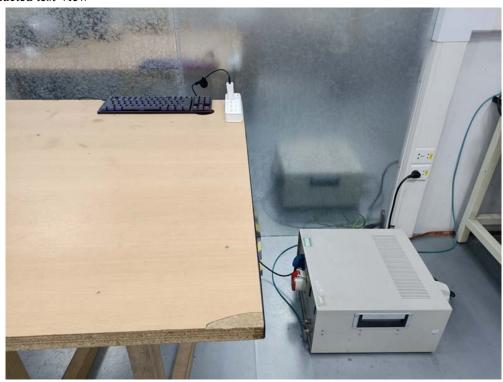
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11.0 Photo of testing

11.1 Conducted test View--



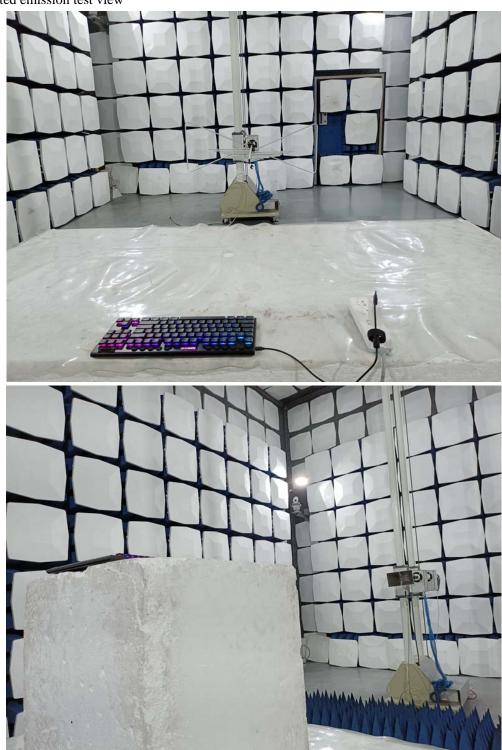
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Radiated emission test view



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Date: 2021-12-31



11.2 Photographs - EUT

Outside View



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adopt any other remedies which may be appropriate.

Date: 2021-12-31



Photographs - EUT

Outside View





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Outside View



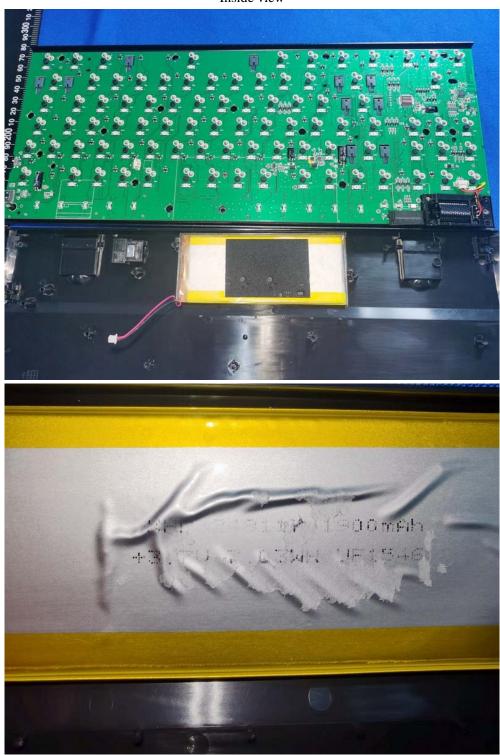
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Inside view



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

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Inside view





-- End of the report--