

Applicant: Eastern Times Technology Co.,Ltd

Product: REDRAGON EXCLUSIVE X1.2 BIG KEYCAP

MECHANICAL KEYBOARD

Model No.: K644CGO-RGB-PRO, ET-8858

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 09, 2023

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 17025:2017 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

CAB identifier: CN0033

Date: 2023-03-09



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: REDRAGON EXCLUSIVE X1.2 BIG KEYCAP 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

Model Number: K644CGO-RGB-PRO

Additional Model Name ET-8858

Rating: Input: DC5V, 650mA or DC3.7V, 150mA

Battery DC3.7V, 1600mAh 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

Hardware Version: 8858-A TX V1

Software Version: 2A56

Serial No.: RDK644CGO-RGB-PRO23011000985

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Antenna Designation PCB antenna with gain 2.34dBi Max (Get from the antenna specification)

1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2023-02-15 to 2023-03-09

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty = 5%

Conducted Emissions Uncertainty =3.6dB

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

1.7 Test Engineer

The sample tested by

Print Name: Andy Xing

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17
LISN	R&S	EZH3-Z5	100253	2022-07-18	2023-07-17
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2022-07-18	2023-07-17
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2022-07-15	2023-07-14
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2022-07-18	2025-07-17
Horn Antenna	R&S	BBHA 9120D	9120D-631	2022-07-18	2024-07-17
Power meter	Anritsu	ML2487A	6K00003613	2022-07-18	2023-07-17
Power sensor	Anritsu	MA2491A	32263	2022-07-18	2023-07-17
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2022-07-18	2025-07-17
9*6*6 Anechoic			N/A	2022-07-26	2025-07-25
EMI Test Receiver	RS	ESVB	826156/011	2022-07-15	2023-07-14
EMI Test Receiver	RS	ESCS 30	834115/006	2022-07-15	2023-07-14
Spectrum	HP/Agilent	E4407B	MY50441392	2022-07-15	2023-07-14
Spectrum	RS	FSP	1164.4391.38	2022-07-15	2023-07-14
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA	-	2022-07-15	2023-07-14
RF Cable	Zhengdi	7m		2022-07-15	2023-07-14
Pre-Amplifier	Schwarebeck	BBV9743	#218	2022-07-15	2023-07-14
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2022-07-15	2023-07-14
LISN	SCHAFFNER	NNB42	00012	2022-08-18	2023-07-17
ESPI Test Receiver	R&S	ESPI 3	100379	2022-07-15	2023-07-14
LISN	R&S	EZH3-Z5	100294	2022-07-18	2023-07-17

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 FIIT	hac haan	tacted ac	cardina ta	n tha fo	llowing	specifications:
	Has Deeli	testeu ac	corume a	0 HIC IV)11(<i>) </i>	succincations.

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

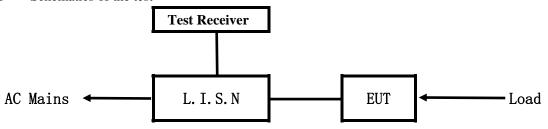
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

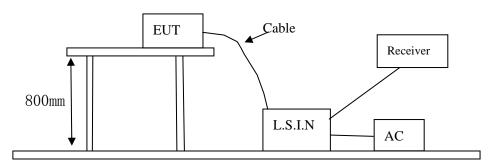


EUT: Equipment Under Test

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.

16 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID
REDRAGON EXCLUSIVE X1.2 BIG KEYCAP MECHANICAL KEYBOARD	Eastern Times Technology Co.,Ltd	K644CGO-RGB-PRO, ET-8858	TUVET-8858A

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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 ~ 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

Date: 2023-03-09



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

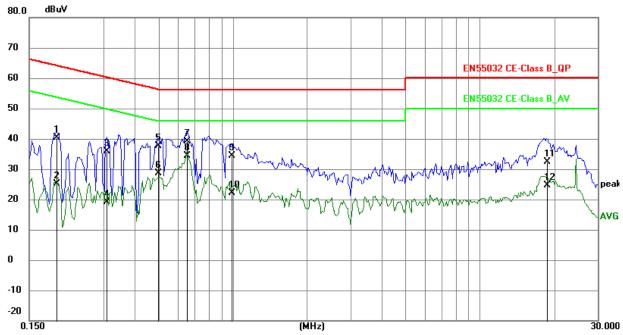
EUT Operating Environment

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	0.1929	30.52	9.75	40.27	63.91	-23.64	QP	Р
2	0.1929	15.45	9.75	25.20	53.91	-28.71	AVG	Р
3	0.3099	26.12	9.76	35.88	59.97	-24.09	QP	Р
4	0.3099	9.34	9.76	19.10	49.97	-30.87	AVG	Р
5	0.4971	27.96	9.77	37.73	56.05	-18.32	QP	Р
6	0.4971	18.84	9.77	28.61	46.05	-17.44	AVG	Р
7	0.6531	29.31	9.78	39.09	56.00	-16.91	QP	Р
8	0.6531	24.54	9.78	34.32	46.00	-11.68	AVG	Р
9	0.9846	24.59	9.79	34.38	56.00	-21.62	QP	Р
10	0.9846	12.27	9.79	22.06	46.00	-23.94	AVG	Р
11	18.6858	21.89	10.60	32.49	60.00	-27.51	QP	Р
12	18.6858	13.95	10.60	24.55	50.00	-25.45	AVG	Р

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

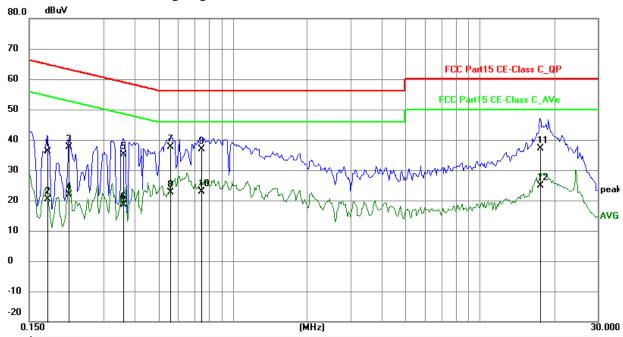
EUT Operating Environment

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	0.1773	26.33	9.77	36.10	64.61	-28.51	QP	Ч
2	0.1773	10.50	9.77	20.27	54.61	-34.34	AVG	Р
3	0.2163	28.00	9.75	37.75	62.96	-25.21	QP	Р
4	0.2163	12.16	9.75	21.91	52.96	-31.05	AVG	Р
5	0.3605	25.44	9.76	35.20	58.72	-23.52	QP	П
6	0.3605	8.93	9.76	18.69	48.72	-30.03	AVG	Л
7	0.5595	27.95	9.77	37.72	56.00	-18.28	QP	Р
8	0.5595	12.77	9.77	22.54	46.00	-23.46	AVG	Р
9	0.7467	27.21	9.78	36.99	56.00	-19.01	QP	Р
10	0.7467	13.12	9.78	22.90	46.00	-23.10	AVG	Р
11	17.5509	26.58	10.53	37.11	60.00	-22.89	QP	Р
12	17.5509	14.33	10.53	24.86	50.00	-25.14	AVG	Р

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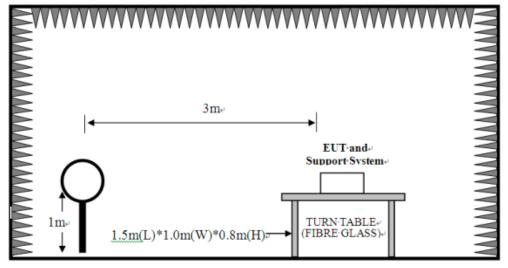


6 Radiated Emission Test

- 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

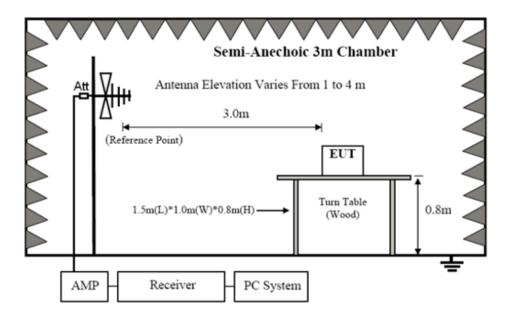
For radiated emissions from 9kHz to 30MHz



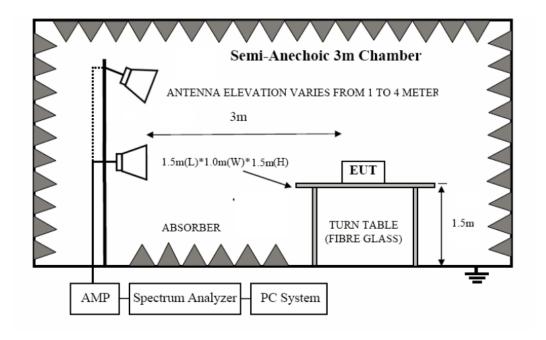
For radiated emissions from 30MHz to1GHz

Date: 2023-03-09





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

Ī	Fundamental Frequency	Field Stre	ength of Fundame	ntal (3m)	Field Strength of Harmonics (3m)			
	(MHz)	mV/m	dBu	V/m	uV/m	dBuV/m		
Ī	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.

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

		<u> </u>			
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 $(dBuV) = 20 \log RF Voltage (uV)$
- 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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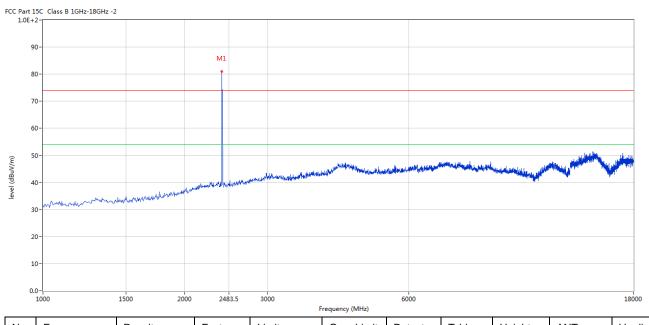


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



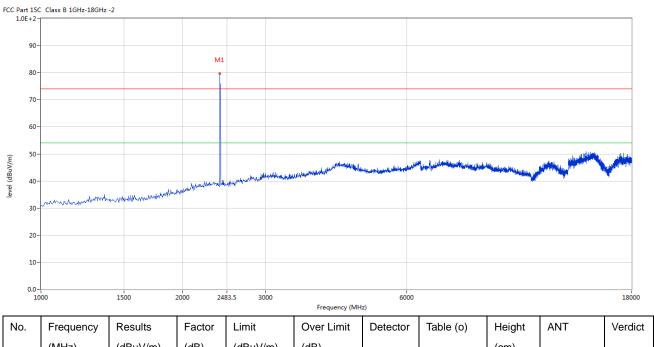
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2403	80.89	-3.57	114.0	-33.11	Peak	223.00	100	Horizontal	Pass

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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	2403	79.62	-3.57	114.0	-34.38	Peak	51.00	100	Vertical	Pass

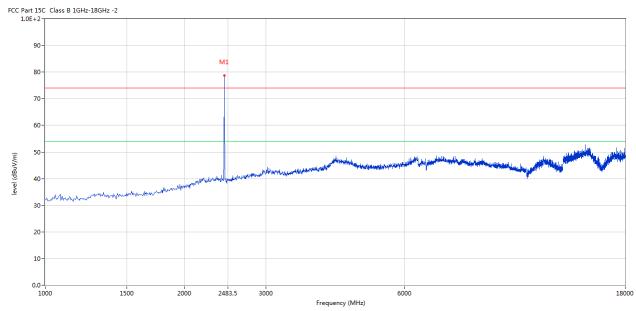
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



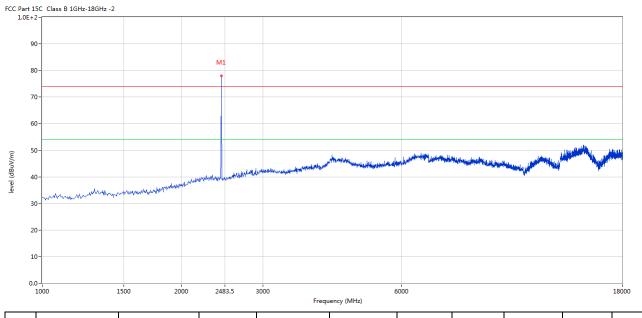
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	78.79	-3.57	114.0	-35.21	Peak	233.00	100	Horizontal	Pass

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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	77.98	-3.57	114.0	-36.02	Peak	317.00	100	Vertical	Pass

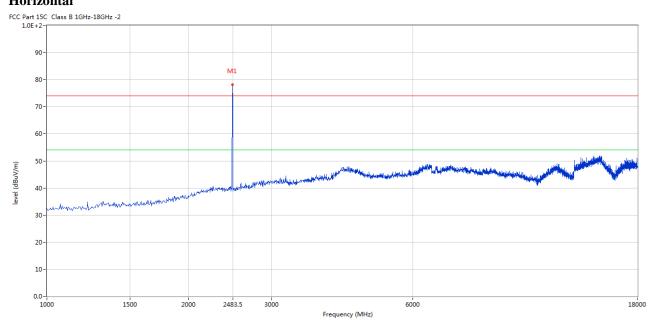
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



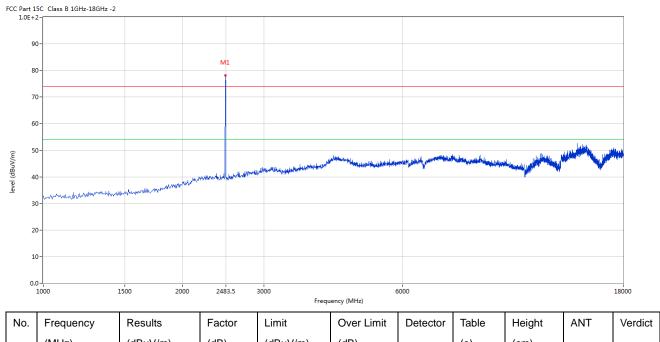
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	78.23	-3.57	114.0	-35.77	Peak	195.00	100	Horizontal	Pass

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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	78.09	-3.57	114.0	-35.91	Peak	325.00	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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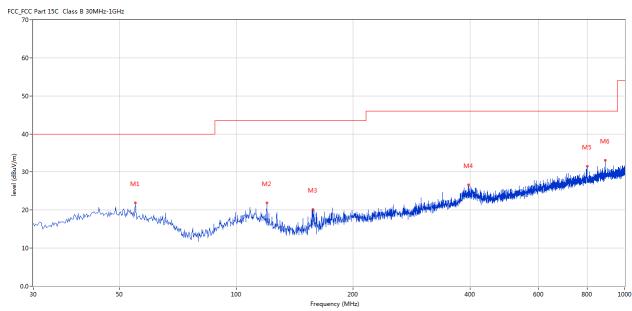


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

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	54.971	21.84	-11.77	40.0	-18.16	Peak	213.00	100	Horizontal	Pass
2	119.945	21.87	-15.32	43.5	-21.63	Peak	93.00	100	Horizontal	Pass
3	157.523	20.21	-16.57	43.5	-23.29	Peak	104.00	100	Horizontal	Pass
4	396.568	26.64	-8.74	46.0	-19.36	Peak	182.00	100	Horizontal	Pass
5	799.745	31.57	-2.97	46.0	-14.43	Peak	295.00	100	Horizontal	Pass
6	890.902	33.07	-1.91	46.0	-12.93	Peak	45.00	100	Horizontal	Pass

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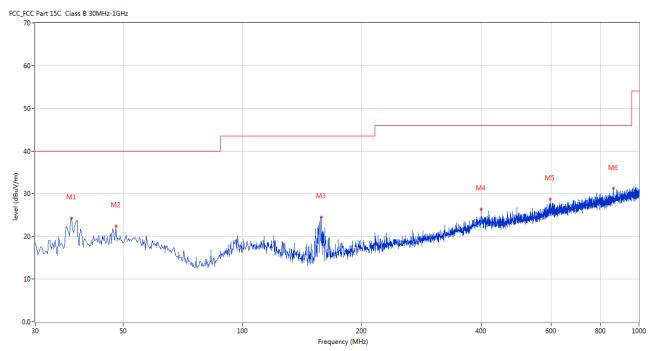


Radiated Emission In Vertical (30MHz----1000MHz)

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	37.031	24.24	-13.17	40.0	-15.76	Peak	224.00	100	Vertical	Pass
2	47.941	22.40	-11.30	40.0	-17.60	Peak	291.00	100	Vertical	Pass
3	157.766	24.50	-16.55	43.5	-19.00	Peak	256.00	100	Vertical	Pass
4	400.205	26.37	-8.58	46.0	-19.63	Peak	39.00	100	Vertical	Pass
5	596.096	28.76	-5.16	46.0	-17.24	Peak	109.00	100	Vertical	Pass
6	861.810	31.18	-2.28	46.0	-14.82	Peak	88.00	100	Vertical	Pass

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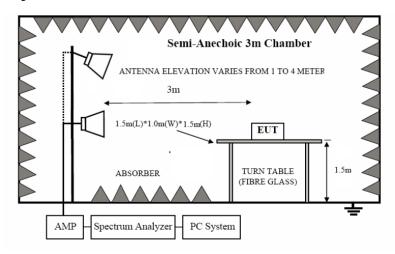


7. Band Edge

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.

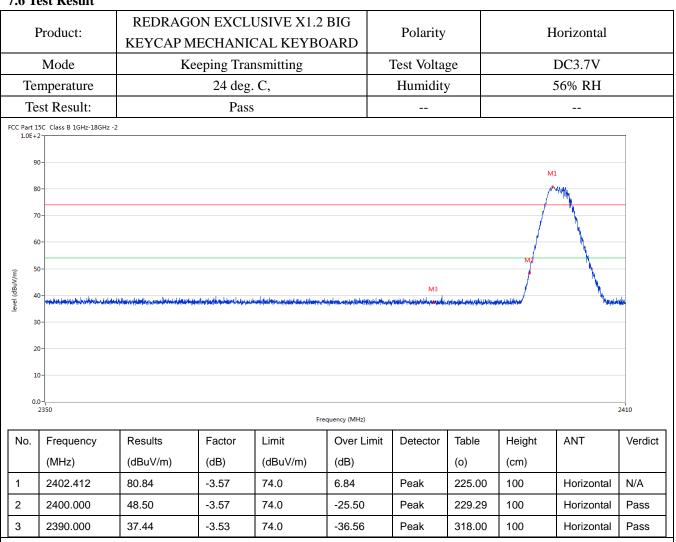
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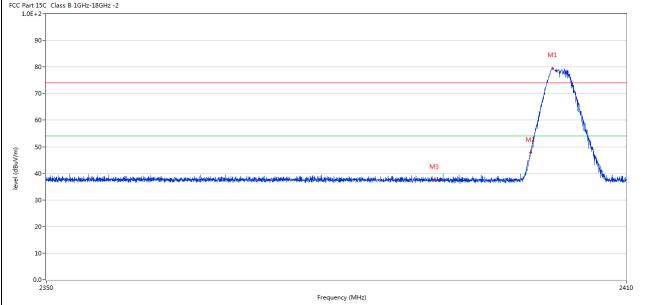
7.6 Test Result



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	Detector	Vartical
CAP MECHANICAL KEYBOARD	Detector	Vertical
Keeping Transmitting	Test Voltage	DC3.7V
24 deg. C,	Humidity	56% RH
Pass		
	Keeping Transmitting 24 deg. C,	Keeping Transmitting Test Voltage 24 deg. C, Humidity

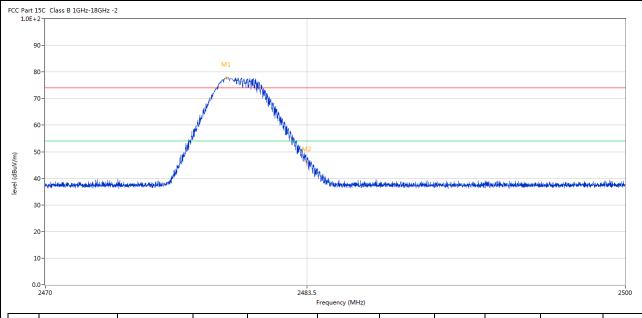


requency (mile)												
	No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict	
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)			
	1	2402.307	79.53	-3.57	74.0	5.53	Peak	61.00	100	Vertical	N/A	
	2	2400.000	47.82	-3.57	74.0	-26.18	Peak	71.00	100	Vertical	Pass	
	3	2390.000	37.57	-3.53	74.0	-36.43	Peak	191.67	100	Vertical	Pass	

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Product:	REDRAGON EXCLUSIVE X1.2 BIG KEYCAP MECHANICAL KEYBOARD	Polarity	Horizontal						
Mode	Keeping Transmitting	Test Voltage	DC3.7V						
Temperature	24 deg. C,	Humidity	56% RH						
Test Result:	Pass								
FCC Part 15C Class R 1GHz-18GHz-2									



No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2479.328	77.87	-3.57	74.0	3.87	Peak	201.00	100	Horizontal	N/A
2	2483.500	45.97	-3.57	74.0	-28.03	Peak	103.00	100	Horizontal	Pass

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I	Product:	REDRAG	ON EXCL	USIVE X1.2 BIG	3 5	etector		V	ertical		
1	rioduct.	KEYCAP N	D D	Detector			vertical				
	Mode	K	eeping Tra	nsmitting	Tes	st Voltage	;	DC3.7V			
Te	mperature		24 deg	g. C,	Hı	umidity		56% RH			
Te	est Result:		Pas	S							
C Part 1	L5C Class B 1GHz-18GHz	-2									
90	0-		M1								
80	0-			ithu.							
70	0-										
60	0-		A CONTRACTOR OF THE PARTY OF TH	M.							
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		50-									
50	0-	Market Control	•								
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36 36 36 10	0-	Results	Factor	2483.5 Frequency	(MHz)	Detector	Table	Height	hronishnjant, militorith.	2500	
30 30 20 10	0		Factor (dB)	2483.5 Frequency	(MHz)						
36 36 36 10	0- 0- 0- 0- 0- 0- 2470	Results		2483.5 Frequency	(MHz) er Limit 3)		Table	Height		2500	

Note: 1. The PK emission level less than the AV limit. No necessary to record the AV emission level.

Date: 2023-03-09



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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 2.34dBi Max. It fulfills the requirement of this section. Test Result: Pass

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Product: REDRAGON EXCLUSIVE X1 KEYCAP MECHANICAL KEY						Test Mode:		Keep transmitting				
Mode		Keepi	ng Transm	itting		Te	st Voltage		DC3.7V			
Temperature		2	24 deg. C,			I	Iumidity		56%	RH		
Test Result:			Pass]	Detector		PI	ζ		
dB Bandwidth		2	2.275MHz									
Ref Lvl 0 dBm		dB	1 [T1 r 20. 2.274549	00 dB	VI	BW BW VT	100 k 100 k 5 m	Hz	F Att	20 dB	n	
-10			1	~	٦		V ₁	[T1]	-13 2.40240 20 2.27454	.00 dB 910 MHz	1	
-30 1MAX		TA		\		July 1	V _T	[T1] [T1]	-33 2.40190 -33 2.40417	.82 dBm 281 GHz .77 dBm 735 GHz	11	
-50 A AND AND AND AND AND AND AND AND AND A	Mandre								Muhhham	W MANAGER		
-60												
-70												
-80											_	
-90											_	
Center 2.	403 GHz	:		500	kHz/				Spa	n 5 MHz	<u>]</u> :	

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Product:	REDRAGON KEYCAP ME	EXCLUSIVE		Test Mod	e:	Keep transmitting DC3.7V		
Mode	Keep	oing Transmitti	ng	Test Volta	ge			
Temperature		24 deg. C,		Humidity	У	56%	6 RH	
Test Result:		Pass		Detector	•	I	PK	
20dB Bandwidth		2.505MHz						
Ref Lvl	Marke ndB BW	r 1 [T1 nd 20.0 2.5050100	0 dB V	RBW 100 VBW 300 SWT 5	kHz	RF Att Jnit	20 dB	
-10		1		no Br	ilis V	-16 2.44041 20 2.50501	.00 dB	A
-20 -30 1MAX	T1				[T1]	2.43970 -37 2.44220	240 GHz .02 dBm 741 GHz	1MA
-40 -50	Me Market Branch					Munder of	M. M. Mary	
-60								
-70								
-80								
-90								
Center 2	8.441 GHz 8.FEB.2023	10:45:20	500 kHz/	,		Spa	n 5 MHz	

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Product:			N EXCLUSIVE X1.2 BIG CHANICAL KEYBOARD			Т	Test Mode:		Keep transmitting		
Mode	g Transmitting			Test Voltage		;	DC3.7V				
Temperature	2	4 deg. C,				Humidity		569	% RH		
Test Result:			Pass				Detector]	PK	
20dB Bandwidth		2.	.465MHz								
Ref Lvl		ndB		00 dB	V	RBW 7BW	100 k 300 k	Hz	F Att	20 dB	
0 dBm		BW 2	2.464929	986 MHz		SWT	5 m	.s Ui	nit	dBm	l I
-10							v ₁	[T1]	-15 2.47940		A
-20			1	\sim			ndE BW ∨ Ti	T1]	2.46492 -35	.00 dB 1986 MHz .29 dBm	
-30		,		V		~~	$\bigvee_{igwedge} igwedge_{ar{f T}}$	[T1]	2.47874		
1MAX		T1						T2	2.48120	741 GHz	1MA
-40 -50	~ /lu , <i>u</i> , <i>u</i> , <i>u</i> , <i>u</i> ,							w	mum	~~~~	
-60											
-70											
-80											
-90											
-100 Center 2	2.48 GH	z		500	kHz/	,			Spa	ın 5 MHz	
Date: 2	8.FEB.2	1023 11	:13:21								

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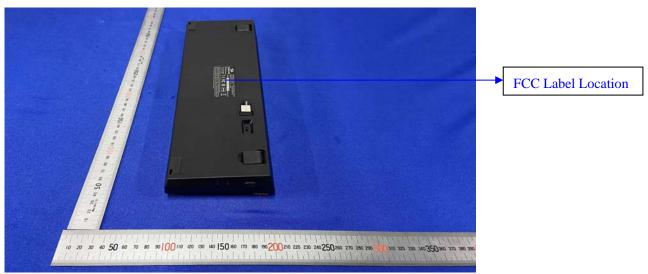
10.0 FCC ID Label

FCC ID: TUVET-8858A

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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11.2



Outside View- keyboard





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Outside View- keyboard





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Outside View- Keyboard





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Inside View- Keyboard





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adopt any other remedies which may be appropriate.

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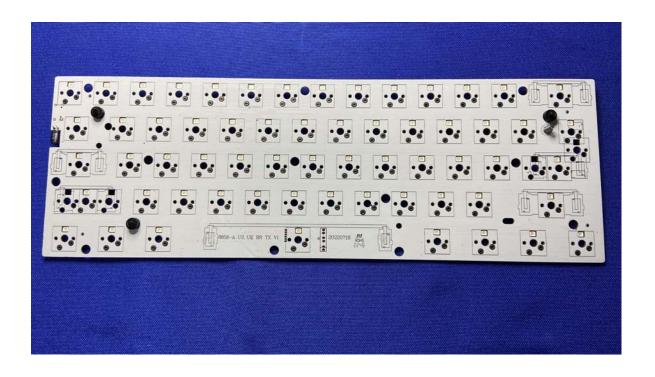
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Inside View- Keyboard





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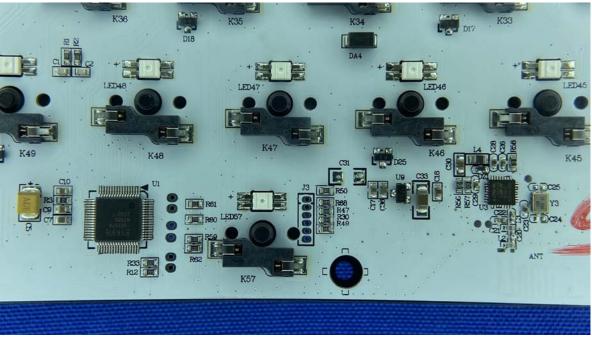
adopt any other remedies which may be appropriate.

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Inside View- Keyboard



-- End of the Report--