

Applicant: Eastern Times Technology Co.,Ltd

Product: REDRAGON 3 MODES HOT-SWAPPABLE GASKET

KEYBOARD

Model No.: K664WBP-RGB-PRO, ET-7045

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

Term lang

Terry Tang

Manager

Dated: April 26, 2024

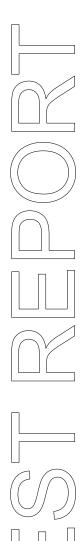
Results appearing herein relate only to the sample tested

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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Date: 2024-04-26



Special Statement:

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: 2024-04-26



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: REDRAGON 3 MODES HOT-SWAPPABLE GASKET KEYBOARD

Manufacturer: Eastern Times Technology Co.,Ltd

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

Dongguan City, Guangdong, China.

Trademark: REDRAGON

Additional Trademark: N/A

Model Number: K664WBP-RGB-PRO

Additional Model Name ET-7045

Hardware Version: 7045-A TX V1

Software Version: D115

Serial No.: RDK664WBP-RGB-PRO2312251293
Rating: DC5V, 780mA or DC3.7V, 280mA
Battery: DC3.7V, 3000mAh Li-ion battery

Modulation Type: GFSK

Operation Frequency: 2402-2480MHz

Channel Separate: 1MHz Channel Number: 79

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

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1.4 Submitted Sample: 1 Samples

1.5 Test Duration 2024-04-03 to 2024-04-26

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty = 5%

Conducted Emissions Uncertainty =3.6dB

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

1.7 Test Engineer

The sample tested by

Print Name: Terry Tang

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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	2023-07-14	2024-07-13	
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13	
LISN	R&S	EZH3-Z5	100253	2023-07-14	2024-07-13	
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2023-07-14	2024-07-13	
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17	
Spectrum	R&S	FSIQ26	100292	2023-07-14	2024-07-13	
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	2023-07-14	2024-07-13	
Power sensor	Anritsu	MA2491A	32263	2023-07-14	2024-07-13	
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	2023-07-14	2024-07-13	
EMI Test Receiver	RS	ESCS 30	834115/006	2023-07-14	2024-07-13	
Spectrum	HP/Agilent	E4407B	MY50441392	2023-07-14	2024-07-13	
Spectrum	RS	FSP	1164.4391.38	2023-07-14	2024-07-13	
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA		2023-07-14	2024-07-13	
RF Cable	Zhengdi	7m		2023-07-14	2024-07-13	
Pre-Amplifier	Schwarebeck	BBV9743	#218	2023-07-14	2024-07-13	
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2023-07-14	2024-07-13	
LISN	SCHAFFNER	NNB42	00012	2023-07-14	2024-07-13	
ESPI Test Receiver	R&S	ESPI 3	100379	2023-07-14	2024-07-13	
LISN	R&S	EZH3-Z5	100294	2023-07-14	2024-07-13	

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	Radiated Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.249(d) Limit	Band Edge Test	Pass	Complies

3.2 Test Standards

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

4.0 EUT Modification

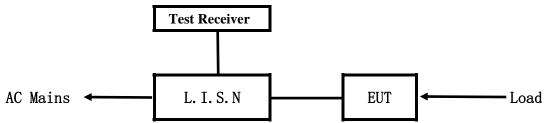
No modification by SHENZHEN TIMEWAY TESTING LABORATORIES

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5. Power Line Conducted Emission Test

5.1 Schematics of the test

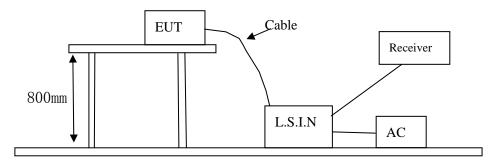


EUT: Equipment Under Test

5.2 Test Method and test Procedure

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

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



5.3 Configuration of the EUT

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

79 channels are provided to the EUT

A. EUT

Device	Manufacturer	Model	FCC ID
REDRAGON 3 MODES	Eastern Times	K664WBP-RGB-PRO,	
HOT-SWAPPABLE GASKET	Technology Co.,Ltd	ET-7045	TUVET-7045A
KEYBOARD	reciniology Co.,Ltd	E1-7043	

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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

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

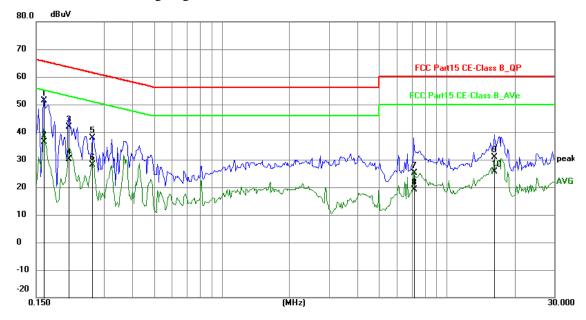
EUT Operating Environment

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

EUT set Condition: Charging and Communication by BT

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1617	41.56	9.78	51.34	65.38	-14.04	QP	Р
2	0.1617	26.68	9.78	36.46	55.38	-18.92	AVG	Р
3	0.2085	32.04	9.75	41.79	63.26	-21.47	QP	Р
4	0.2085	20.40	9.75	30.15	53.26	-23.11	AVG	Р
5	0.2670	28.20	9.75	37.95	61.21	-23.26	QP	Р
6	0.2670	18.33	9.75	28.08	51.21	-23.13	AVG	Р
7	7.1379	15.16	10.02	25.18	60.00	-34.82	QP	Р
8	7.1379	9.00	10.02	19.02	50.00	-30.98	AVG	Р
9	16.2561	20.33	10.46	30.79	60.00	-29.21	QP	Р
10	16.2561	15.05	10.46	25.51	50.00	-24.49	AVG	Р

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

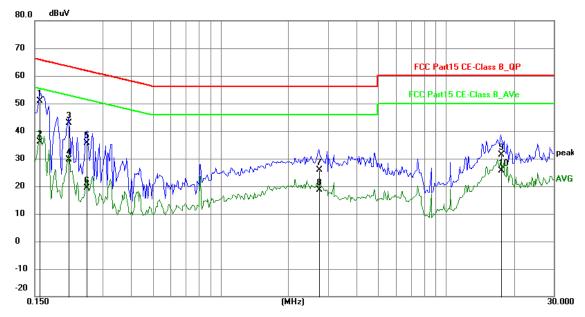
EUT Operating Environment

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

EUT set Condition: Charging and Communication by BT

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1578	41.16	9.78	50.94	65.58	-14.64	QP	Р
2	0.1578	26.35	9.78	36.13	55.58	-19.45	AVG	Р
3	0.2124	33.04	9.75	42.79	63.11	-20.32	QP	Р
4	0.2124	19.91	9.75	29.66	53.11	-23.45	AVG	Р
5	0.2553	26.00	9.75	35.75	61.58	-25.83	QP	Р
6	0.2553	9.61	9.75	19.36	51.58	-32.22	AVG	J
7	2.7279	15.94	9.83	25.77	56.00	-30.23	QP	Р
8	2.7279	8.75	9.83	18.58	46.00	-27.42	AVG	Р
9	17.4807	20.90	10.53	31.43	60.00	-28.57	QP	Р
10	17.4807	15.18	10.53	25.71	50.00	-24.29	AVG	Р

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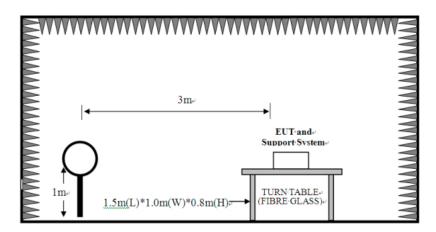


6 Radiated Emission Test

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

Block diagram of Test setup

For radiated emissions from 9kHz to 30MHz



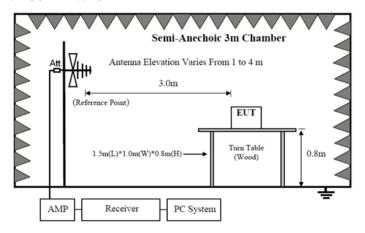
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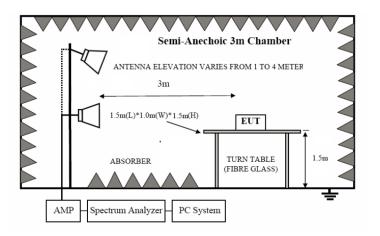
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For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



- 6.2 Configuration of The EUT

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

 Same as section 5.4 of this report.

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6.4 Radiated Emission Limit

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

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

Fundamental Frequency	Field Strength of Fundamental (3m)			Field S	trength of Harmo	nics (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 Voltage (uV)
- 2.Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- 3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

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

Frequency Range (MHz)	Distance (m)	Field strength (dB 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
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

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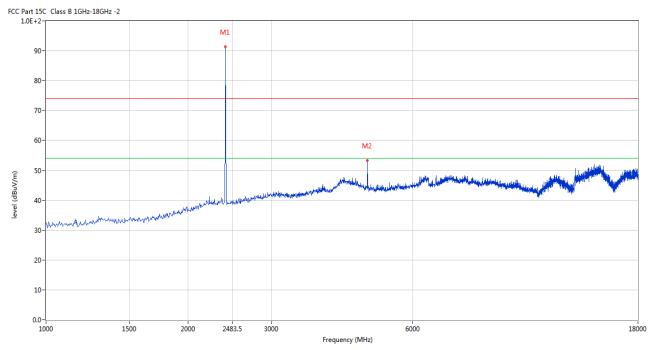


6.5 Test result

A Fundamental & Harmonics Radiated Emission Data

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

Horizontal



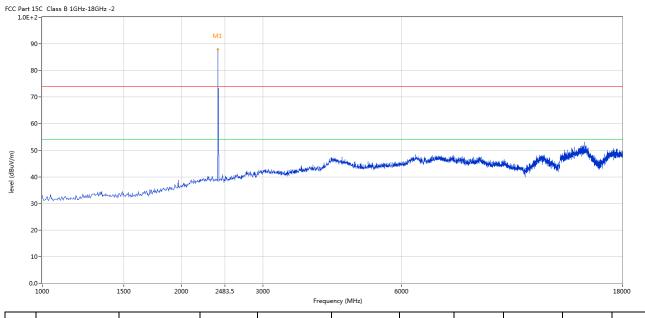
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2402	91.40	-3.57	114.0	-18.60	Peak	286.00	100	Horizontal	Pass
2	4802.799	53.21	3.12	74.0	-20.79	Peak	302.00	100	Horizontal	Pass

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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	88.03	-3.57	114.0	-25.97	Peak	45.00	100	Vertical	Pass

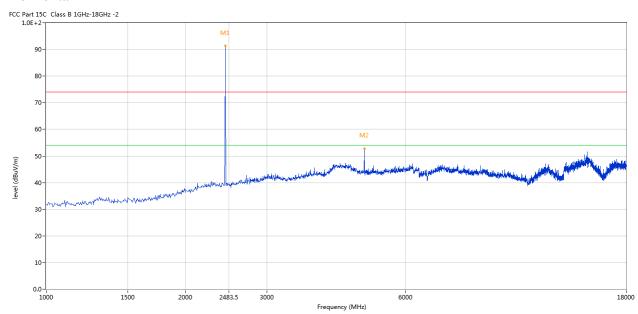
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Please refer to the following test plots for details: Middle Channel-2441MHz

Horizontal



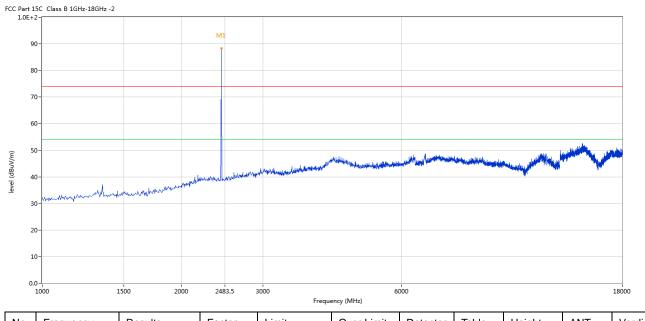
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2441	91.34	-3.57	114.0	-22.66	Peak	272.00	100	Horizontal	Pass
2	4879.280	52.67	3.20	74.0	-21.33	Peak	272.00	100	Horizontal	Pass

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Vertical



Ν	lo.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
		(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1		2441	88.29	-3.57	114.0	-25.71	Peak	43.00	100	Vertical	Pass

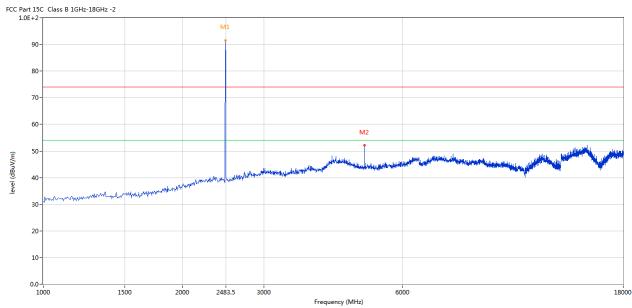
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Please refer to the following test plots for details: High Channel-2480MHz

Horizontal



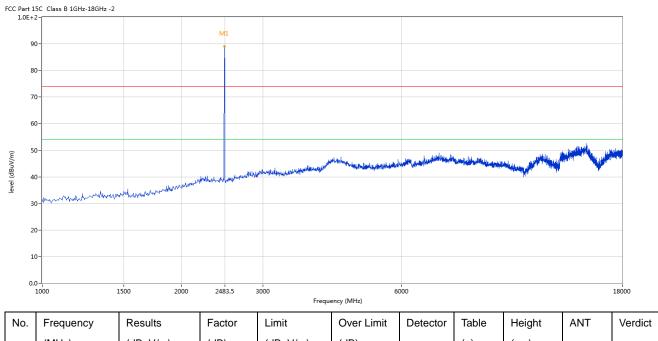
No.	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
1	2480	91.49	-3.57	114.0	-22.51	Peak	254.00	100	Horizontal	Pass
2	4960.010	52.14	3.36	74.0	-21.86	Peak	44.00	100	Horizontal	Pass

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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	89.14	-3.57	114.0	-24.86	Peak	48.00	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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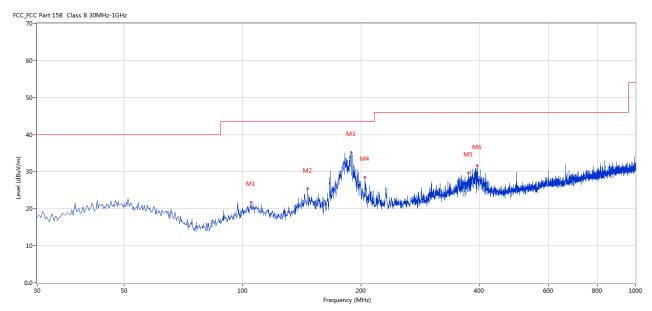


B. General Radiated Emission Data Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Margin	Detector	Table	Height	Antenna	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(Degree)	(cm)		
1	105.156	21.79	-13.23	43.5	21.71	Peak	268.00	100	Horizontal	Pass
2	146.613	25.39	-17.26	43.5	18.11	Peak	282.00	100	Horizontal	Pass
3	189.040	35.18	-14.33	43.5	8.32	Peak	250.00	100	Horizontal	Pass
4	205.041	28.52	-13.59	43.5	14.98	Peak	250.00	100	Horizontal	Pass
5	375.234	29.66	-9.42	46.0	16.34	Peak	359.00	100	Horizontal	Pass
6	396.083	31.62	-8.72	46.0	14.38	Peak	359.00	100	Horizontal	Pass

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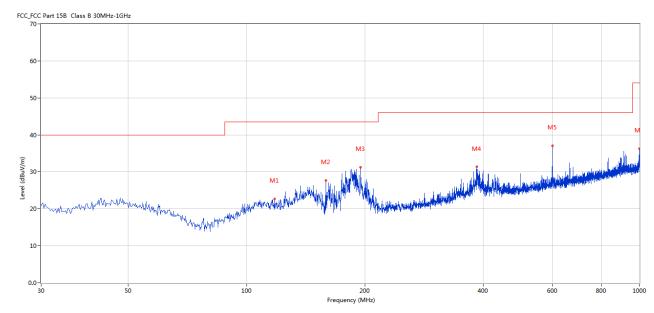


Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency	Results	Factor	Limit	Margin	Detector	Table	Height	Antenna	Verdict
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dB)		(Degree)	(cm)		
1	117.763	22.65	-14.92	43.5	20.85	Peak	260.00	100	Vertical	Pass
2	158.978	27.65	-16.44	43.5	15.85	Peak	216.00	100	Vertical	Pass
3	195.101	31.20	-13.78	43.5	12.30	Peak	31.00	100	Vertical	Pass
4	385.901	31.32	-9.12	46.0	14.68	Peak	287.00	100	Vertical	Pass
5	599.975	37.08	-4.95	46.0	8.92	Peak	104.00	100	Vertical	Pass
6	998.788	36.30	-1.16	54.0	17.70	Peak	343.00	100	Vertical	Pass

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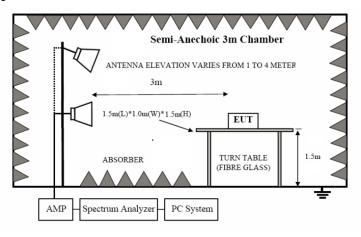


7. Band Edge

7.1 Test Method and test Procedure:

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

7. 2 Radiated Test Setup



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

7.3 Configuration of the EUT

Same as section 5.3 of this report

7.4 EUT Operating Condition

Same as section 5.4 of this report.

7.5 Band Edge Limit

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

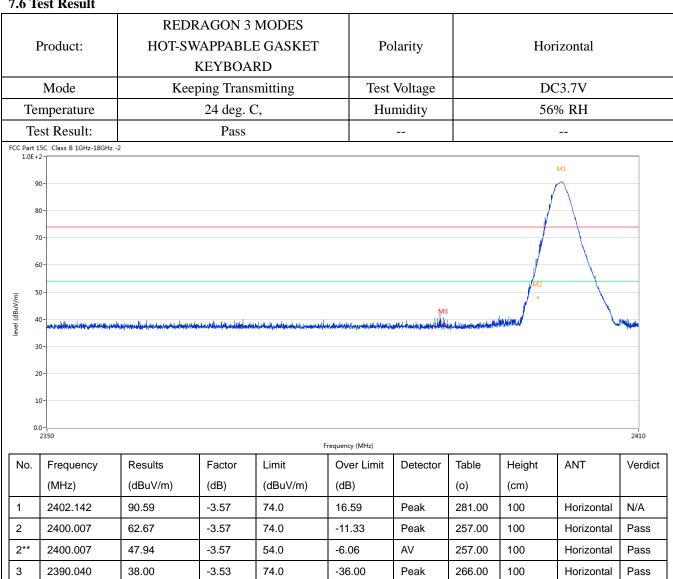
The report refers only to the sample tested and does not apply to the bulk.

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7.6 Test Result



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]	Product:		WAPPABL	E GASKET	Der	tector		Vert	ical	
	Mode	Kee	eping Trans	smitting	Test '	Voltage		DC3	3.7V	
Te	Mode Keeping Transmitting nperature 24 deg. C, st Result: Pass C Class B 1GHz-18GHz-2	C,	Hur	nidity		56% RH				
Te	mperature 24 deg. C, st Result: Pass GC Class B 1GHz-18GHz -2					_				
Part 1		t Result: Pass								
							M1			
9	10-								Иr^	
8					<i>}</i>	//				
7	70-								\	
								J		
6	60-							J'		
5	60-							M2	My (
5	10-		Aborba duna talifi.			M harata a harafada h		M2 °	May	Mark Lines
4	10 - rahmplassiyhandasiyymaniasyiniddiindis	چېردونون ورونونونونونونونونونونونونونونونونو	opelmentaries and expedition	Approved the second section of the second	العروب إخرار المعارب ويتانا	M irilani, nemah, milikih di		M2 •	**	Maha
4	10-	Marie adapt of adapt in his distribution of the second	ghttiga tagta aigs antany militina	Andreas transcript recognists of his bar	nitraja esta est interessivi, erapti			M2 •	Ny	Maham
4	10 - rahmplassiyhandasiyymaniasyiniddiindis	offenioralism grading stated, when the specimen the specimens	geldrin legel night artensy relations	dopological designation de la designation designation de la design	etrope etter en det de en enger) en tigte			M2 o	My.	Mahin
3	10- policy fraction processing day to	pt of the state of	et drie leefe zijn enter yn ddiese	de principal de la companya de la distribución de la companya de l	alek ya area a a a a a a a a a a a a a a a a a			M2 •	N	Mulum
4 3 2	10 - salaylaqidarkayyaaciiyyaddisha	offeninsku grade skåd, aktelis jedana hegasor	geldrin laget night arten problèmes	dopological establishment de la destablishment de la destablishment de la destablishment de la destablishment	dfagg, ddish and ddish amenger fundfyll			M2 •	N. C.	Moderne
4 3 2 1	10 - salaylaqidarkayyaaciiyyaddisha	Physical graph and Archive Specimen Angus programs	ppedroise deposits and a section of the debiases.	dog trace to describe a security and a desire had	Frequency (MHz)			M2 •		THE PARTY NET
4 3 2 1		Results	Factor	han bankan da banka b	Frequency (MHz)			M2	ANT	24
4 3 2 1	00 - 1	Clifford and American Constraints and American		Limit (dBuV/m)	1	iritari (nem hembelika)	ingerendy and a strong whether a	4.4.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A	ANT	24
4 3 2 1	Frequency	Results	Factor		Over Limit	iritari (nem hembelika)	Table	Height	ANT	24
4 3 3 2 1 1 0.0 No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	(dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)		24 Verdi
4 3 3 2 2 1 1 0.	Frequency (MHz) 2402.292	Results (dBuV/m) 87.31	Factor (dB) -3.57	(dBuV/m) 74.0	Over Limit (dB) 13.31	Detector Peak	Table (o) 40.00	Height (cm)	Vertical	Verdid

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I	Product:			3 MODES BLE GASKE DARD	Т	Polarity		Н	orizontal	
	Mode	K	eeping Tra	ansmitting	,	Test Voltag	e	I	DC3.7V	
Te	mperature		24 deg			Humidity		5	66% RH	
Te	est Result:		Pas							
C Part 1	.5C Class B 1GHz-18GH	z -2			· ·		l .			
94 84 74 64	0-	,	M. Company of the Com	The state of the s	w					
41	O-	miles to law management of the		M	14	Made de la	وباويتوابا أغنا ميلوم ليروا	الفهرول بميشي والإطاعية والمعادد	ing to the first the large through the same discussion of the same d	and the state of t
20	0-									
10	0-									
0.0										
	2470			248	3.5 Frequency (MHz)					2
No.	Frequency	Results	Factor	Limit	Over	Detector	Table	Height	ANT	Verdi
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	Limit (dB)		(o)	(cm)		
1	2479.793	91.07	-3.57	74.0	17.07	Peak	259.00	100	Horizontal	N/A
2	2483.500	53.45	-3.57	74.0	-20.55	Peak	264.00	100	Horizontal	Pass
2**	2483.500	39.41	-3.57	54.0	-14.59	AV	264.00	100	Horizontal	Pass

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		REI	DRAGON (3 MODES						
	Product:	HOT-S	WAPPABI	LE GASKET	De De	etector		Ve	rtical	
			KEYBO	ARD						
	Mode	Ke	eping Tran	smitting	Test	t Voltage		DC	23.7V	
Te	emperature		24 deg.	C,	Hu	ımidity		569	% RH	
T	est Result:		Pass							
C Part	15C Class B 1GHz-18GHz	-2								
			M1							
	90-		No.	<u> </u>						
	30-									
	0									
	1									
	50-	A		K	%					
	10 -	handadadadada			And the second s	in with the property of the state of the sta	da and distribution	المرافاة الدويوسوا والمادية والمدورة	والعليمة فليمن الجدوال وزوام فيستراق عالم والجاد	annico-relativ
	30-									
	20-									
	10-									
(.0- 2470			2483.5 F	requency (MHz)					2500
	Frequency	Results	Factor	Limit	Over Limit	Detector	Table	Height	ANT	Verd
No.		(dBuV/m)	(dB)	(dBuV/m)	(dB)		(o)	(cm)		
No.	(MHz)	(ubu v/III)	2479.823 88.53 -3.57 74.0							
No.		1	-3.57	74.0	14.53	Peak	44.00	100	Vertical	N/A

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 with gain 2.34dBi maximum. It fulfills the requirement of this section.

Test Result: Pass

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Product:	НОТ-		RAGON 3 BLE GASI	MODES KET KEY	BOARD	Test Mo	de:		Keep tra	nsmittin	g
Mode		Keel	ping Trans	mitting		Test Volt	age		DC	3.7V	
Temperature			24 deg. (Ξ,		Humidi	ity		56%	6 RH	
Test Result:			Pass			Detect	or		F	PK	
dB Bandwidth			992kHz	Z							
Ref Lvl	10 dBm BW 991.98396794 kHz					30 k 100 k 8.5 m	Hz	RF Un	Att	20 dE	
10			I	1	SWT		1				7
0						V ₁	[T1]		-1 2.40200	.19 dE 301 GH	
					مممرك	ndl BW	B		20 1.98396		
-10	\sim				-	▽ _T	[T1		-21 2.40151	.43 dE	
-20	TI					T2T	2 [T1	. 1	-20		
1MAX		<				4	Ž		2.40250	802 GH	1
-30	~						4		\		
-50	كمر									^	~
7											
-60											
70											
-80	0										
-90											
Center 2.	402 G	Hz		300	kHz/				Spa	n 3 MH	z

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Mode Keeping Transmitting Test Voltage DC3.7V	Product:	REDRAGON 3 MODES HOT-SWAPPABLE GASKET KEYBOARD				Т	est Mode:		Keep transmitting			
Test Result: 20dB Bandwidth 992kHz Ref Lvl 10 dBm BW 991.98396794 kHz SWT 8.5 ms Unit dBm 10 10 10 10 10 10 10 10 10 1	Mode	Keeping Transmitting				T	est Voltage	;	DC3.7V			
20dB Bandwidth 992kHz	Temperature								56% RH			
Marker 1 [T1 ndB] RBW 30 kHz RF Att 20 dB 100 kHz 10 dBm 20.00 dB VBW 100 kHz SWT 8.5 ms Unit dBm 2.4400301 GHz 2.4400301 GHz 2.000 dB BW 951.98396794 kHz VT [T1] -1.88 dBd 2.4400301 GHz 2.400 dB BW 951.98396794 kHz VT [T1] -22.77 dBd 2.44052204 GHz -22.77 dBd 2.44052204 GHz -22.77 dBd 2.44052204 GHz -22.77 dBd 3.77	Test Result:						Detector		PK			
Ref Lvl ndB 20.00 dB VBW 100 kHz 10 dBm BW 991.98396794 kHz SWT 8.5 ms Unit dBm V1 [T1] -3.88 dBm 2.44100 301 GHz 10 dBm 901.98396794 kHz VT [T1] -2.00 dB BW 901.98396794 kHz VT [T1] -2.73 dBm 2.44105 204 GHz -20 1MAX 2.44155 403 GHz 1MAX 3.00 dBm 300 dBm	20dB Bandwidth											
TI [TI] -3.88 dBm 2.4410(301 GHz 2.000 dB BW 951.98396794 kHz VT [TI] -27.73 dBm 2.44052204 GHz -20 1MAX 2.44151403 GHz 1MA 1MA -30 -50 -60 -70 -80 -90	10 dBm	ndB 20.00 dB			V	BW 100 kHz					ı	
BW 951.98396794 kHz \[\frac{1}{\text{T1}} -2 \text{73 dBn}}{2.44052204 \text{ GHz}} \] -20 IMAX -30 -60 -60 -70 -80 -90								[T1]	-1 2.44100	301 GHz	A	
-20 1MAX -30 -40 -50 -60 -70 -90	-10				Z m	<u>_</u>	BW		-21	794 kHz	ı.	
-40 -50 -60 -70 -80 -90	-20		T1				V _{T2}	2 [T1]	-22	.27 dBm		
-50 -60 -70 -80 -90			~				مر	<u>ц</u>			1MA	
-50 -60 -70 -80 -90	-40	\mathcal{N}						h				
-60 -70 -80 -90								v		~		
-70 -80 -90	who											
-80												
-90												
	-80											
Date: 17.APR.2024 16:03:16												

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Product:	REDRAGON 3 MODES HOT-SWAPPABLE GASKET KEYBOARD				Test Mode:			Keep transmitting			
Mode	Keeping Transmitting					Test Voltage			DC3.7V		
Temperature	24 deg. C,					Humidity			56% RH		
Test Result:	Pass					Detector			PK		
20dB Bandwidth	986kHz										
Ref Lvl 10 dBm		ndB	1 [T1 r 20. 5.971943	.00 dB	V	BW BW WT	30 kF 100 kF 8.5 ms	łz	F Att	20 dB	ı
0							▼1	[T1]	2.47999	.02 dBm 098 GHz	A
-10					ممر	<u> </u>	BW ∇ _{T1}	98 [T1]	5.97194 -21	389 kHz	
-20			T1,	<i>,</i>		\ 	V _{T2}	[T1]	2.47952 -22 2.48050	.11 dBm	
-30							كم	`			1MA
-40		\bigwedge^{\vee}									
-50		V							W		
-60 MMM	~/									V.	
-70											
-80											
-90 Center 2.48 GHz 300 kHz/ Span 3 MHz Date: 17.APR.2024 15:51:39											

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10.0 FCC ID Label

FCC ID: TUVET-7045A

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





Photographs - EUT

Please refer test report TW2404053-01E

-- End of the report--

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

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