

Page 1 of 27

Report No.: HK2408194734-E

# **FCC Test Report**

Test report On Behalf of Intracom Asia Co., Ltd. For wireless keyboard Model No.: KM-263W

### FCC ID: 2ADQY-180795KB

Prepared For :

Intracom Asia Co., Ltd.

4F., No.77, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan

Prepared By :

#### Shenzhen HUAK Testing Technology Co., Ltd.

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Date of Test:	Aug. 19, 2024~Aug. 26, 2024
Date of Report:	Aug. 26, 2024
Report Number:	HK2408194734-E

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## **Test Result Certification**

Applicant's name:	Intracom Asia Co., Ltd.
Address:	4F., No.77, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221, Taiwan
Manufacturer's Name:	Guangzhou Maipai Electronics Co., Ltd.
Address:	Room 201, 301, 401, No.689, Shinan Road, Xianchong Village, Qiaonan Street, Panyu District of Guangzhou, China
Product description	

Trade Mark:	N/A
Product name:	wireless keyboard
Model and/or type reference :	KM-263W
Standards	FCC Rules and Regulations Part 15 Subpart C Section 15.249 ANSI C63.10: 2013

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Date of Test	
Date (s) of performance of tests	Aug. 19, 2024~Aug. 26, 2024
Date of Issue:	Aug. 26, 2024
Test Result	Pass

Testing Engineer

len lias

(Len Liao)

Technical Manager

iver Mon

(Sliver Wan)

Authorized Signatory :

ason Mou

(Jason Zhou)

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Revision Revision 1.0	** Modified Histo Description Initial Test Report Release	Issued Data Aug. 26, 2024	Remark Jason Zhou
TESTING HUAKTE	STING NUM TESTING	TESTING HUAKTEST	IS HUAKTESTIN

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#### 1. Test Summary

#### 1.1. Test Procedures and Results

DESCRIPTION OF TEST	SECTION NUMBER	RESULT
CONDUCTED EMISSIONS TEST	15.207	N/A
RADIATED EMISSION TEST	15.249(a)/15.209	COMPLIANT
BAND EDGE	15.249(d)/15.205	COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT	15.215 (c)	COMPLIANT
ANTENNA REQUIREMENT	15.203	COMPLIANT

1.2. Information of the Test Laboratory

Shenzhen HUAK Testing Technology Co., Ltd. Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization:

A2LA Accreditation Code is 4781.01. FCC Designation Number is CN1229. Canada IC CAB identifier is CN0045. CNAS Registration Number is L9589.

1.3. Measurement Uncertainty

Conducted Emission Expanded Uncer	tainty
Radiated emission expanded uncertain	nty(9kHz-30MHz)
Radiated emission expanded uncertain	nty(30MHz-1000MHz)
Radiated emission expanded uncertain	nty(Above 1GHz)

- = 2.71dB, k=2
- = 3.90dB, k=2
- = 3.90dB, k=2
- = 4.28dB, k=2

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ACATION

### 2. General Information

### 2.1. General Description of EUT

all the second sec
wireless keyboard
KM-263W
N/A
N/A OM
2ADQY-180795KB
PCB Antenna
-0.86dBi
2402-2480MHz
40CH
GFSK
DC 1.5V From Battery
DC 1.5V From Battery

#### Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

- 2. Antenna gain Refer to the antenna specifications.
- 3. The cable loss data is obtained from the supplier.
- 4. The test results in the report only apply to the tested sample.

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### 2.1.1. Carrier Frequency of Channels

Hor On		Description o	f Channel:	O HON	0
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
AKTEN 1	2402	15	2430	29	2458
2	2404	16	2432	30	2460
3	2406	17	2434	31	2462
4 HUAK T	2408	18	2436	32	2464
5	2410	9 19	2438	33	2466
6	2412	20	2440	34	2468
17 M	2414	21	2442	35	2470
8	2416	22	2444	36	2472
9	2418	23	2446	37	2474
10	2420	24	2448	38,500	2476
11 🕘	2422	25	2450	39	2478
12	2424	26	2452	40	2480
13	2426	27	2454	- market	
14	2428	28	2456		mark



### Operating Mode

The mode is used: Transmitting mode

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

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#### 2.3. Description of Test Setup

### Operation of EUT during testing:

EUT

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. The worst case is X position.

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#### 2.4. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ltem	Equipment	Trade Mark	Model/Type No.	Specification	Remark
KTEST O	wireless keyboard	N/A	KM-263W	N/A	EUT
		0	HUAKTES		IUAL TES
Ģ		STING		-STING	

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

3. For conducted measurements (Occupied Bandwidth), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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#### 2.5. Measurement Instruments List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	L.I.S.N.	R&S	ENV216	HKE-002	2024/02/20	1 Year
2	L.I.S.N.	R&S	ENV216	HKE-059	2024/02/20	1 Year
3	EMI Test Receiver	R&S	ESR	HKE-005	2024/02/20	1 Year
4	Spectrum analyzer	Agilent	N9020A	HKE-025	2024/02/20	1 Year
5	Spectrum analyzer	R&S	FSV3044	HKE-126	2024/02/20	1 Year
6	Preamplifier	EMCI	EMC051845S	HKE-006	2024/02/20	1 Year
7	Preamplifier	Schwarzbeck	BBV 9743	HKE-016	2024/02/20	1 Year
8	Preamplifier	A.H. Systems	SAS-574	HKE-182	2024/02/20	1 Year
9	6d Attenuator	Pasternack	6db	HKE-184	2024/02/20	1 Year
10	EMI Test Receiver	Rohde & Schwarz	ESR-7	HKE-010	2024/02/20	1 Year
11	Broadband Antenna	Schwarzbeck	VULB9168	HKE-167	2024/02/21	2 Year
12	Loop Antenna	COM-POWER FMZB 1519 012 May 11, 2016 1 Year	AL-130R	HKE-014	2024/02/21	2 Year
ິ 13	Horn Antenna	Schwarzbeck	9120D	HKE-013	2024/02/21	2 Year
14	EMI Test Software	Tonscend	JS32-CE 2.5.0.6	HKE-081	ESTING /	ma Dhu
15	EMI Test Software	Tonscend	JS32-RE 5.0.0	HKE-082	7	/
16	RF Automatic control unit	Tonscend	JS0806-2	HKE-060	2024/02/20	1 Year
17	High pass filter unit	Tonscend	JS0806-F	HKE-055	2024/02/20	1 Year
18	Wireless Communication Test Set	R&S	CMU200	HKE-026	2024/02/20	1 Year
19	Wireless Communication Test Set	R&S	CMW500	HKE-027	2024/02/20	1 Year
20	High-low temperature chamber	Guangke	HT-80L	HKE-118	2024/06/10	1 Year
21	Temperature and humidity meter	Boyang	HTC-1	HKE-075	2024/06/10	1 Year
22	RF Test Software	Tonscend	JS1120-3 Version 3.3.23	HKE-083	1	1
23	10dB Attenuator	Schwarzbeck	VTSD9561F	HKE-153	2024/02/20	1 Year
24	RSE Test Software	Tonscend	JS36-RSE 5. 0.0	HKE-184	1	/

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**HUAK TESTING** 

### 3.1. Conducted Power Line Emission Limit

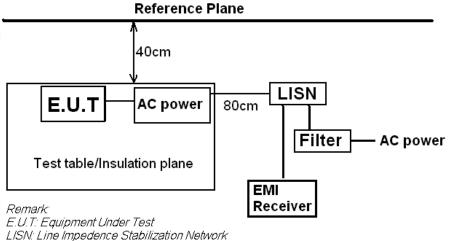
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following.

Frequency	M	Maximum RF Line Voltage (dBμV)				
(MHz)	CLAS	SS A	C	LASS B		
(11112)	Q.P.	Ave.	Q.P.	Ave.		
0.15 - 0.50	79	66	66-56*	56-46*		
0.50 - 5.00	73	60	56	46		
5.00 - 30.0	73	60	60	50		

\* Decreasing linearly with the logarithm of the frequency.

For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

#### 3.2. Test Setup



LISN: Line Impedence Stabiliz Test table height=0.8m

#### 3.3. Test Procedure

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5. All support equipments received AC power from a second LISN, if any.
- 6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / keyboard connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / keyboard and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / keyboard.
- 7. Analyzer / keyboard scanned from 150 KHz to 30MHz for emissions in each of the test modes.

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FICATION

### 3.4. Test Result

Not applicable. Note: EUT power supply by DC Power, so this test item not applicable.

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#### 4. Radiated Emission Test

#### 4.1. Radiation Limit

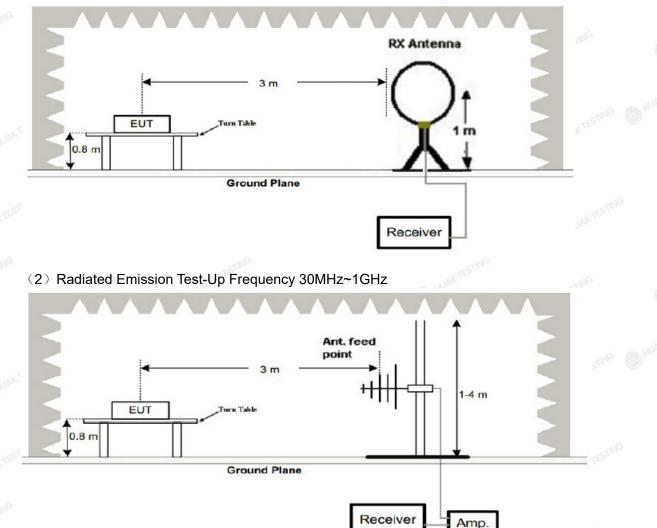
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency	Distance	Radiated	Radiated
(MHz)	(Meters)	(dBµV/m)	(µV/m)
0.009-0.490	300	20log 2400/F (kHz)	2400/F (kHz)
0.490-1.705	30	20log 24000/F (kHz)	24000/F (kHz)
1.705-30	30	20log 30	30
30-88	3	40	100
88-216	3	43.5	150
216-960	TESTING 3	46	200
Above 960	1 HUM 3	54	500
100 112	10	-C.W. (1997)	ADC.

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

#### 4.2. Test Setup

(1) Radiated Emission Test-Up Frequency Below 30MHz

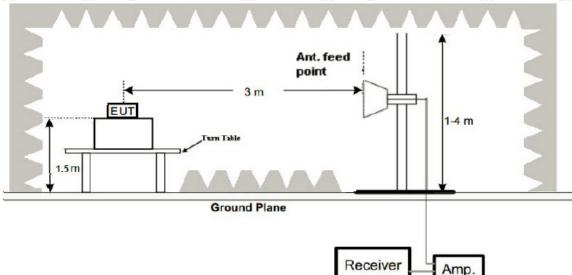


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(3) Radiated Emission Test-Up Frequency Above 1GHz



- 4.3. Test Procedure
  - 1. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
  - 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
  - 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
  - 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
  - 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
  - 6. Repeat above procedures until the measurements for all frequencies are complete.
  - 7. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a).

#### Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

#### 4.4. Test Result

#### PASS

All the test modes completed for test. The worst case of Radiated Emission is Low channel; the test data of this mode was reported.

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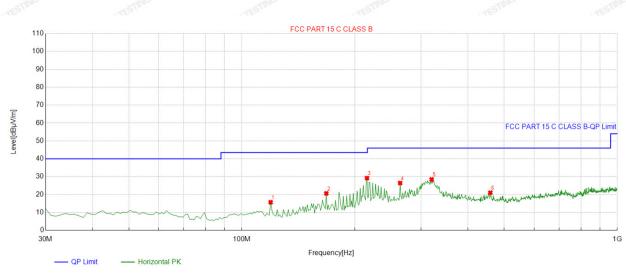
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NG

#### Below 1GHz Test Results:

Antenna polarity: H



QP Detector

Su	uspe	cted List								
		Freq.	Factor	Reading	Level	Limit	Margin	Height	Angle	
3 N	IO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
	1	119.32932	-15.94	31.67	15.73	43.50	27.77	100	75	Horizontal
	2	167.87787	-17.31	37.98	20.67	43.50	22.83	100	131	Horizontal
ų ;	3	215.45545	-14.72	43.93	29.21	43.50	14.29	100	92	Horizontal
	4	264.00400	-13.15	39.62	26.47	46.00	19.53	100	228	Horizontal
	5	320.32032	-11.20	39.69	28.49	46.00	17.51	100	280	Horizontal
	6	459.16916	-8.94	29.99	21.05	46.00	24.95	100	260	Horizontal

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level

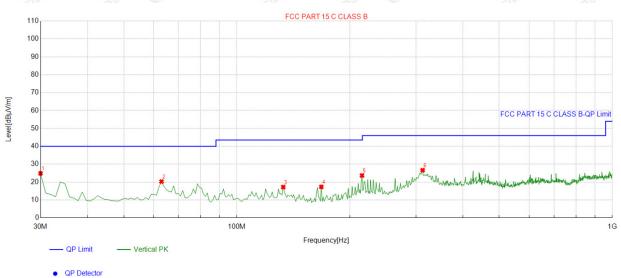
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#### Report No.: HK2408194734-E

#### Antenna polarity: V



Suspected List

_	Freq.	Factor	Reading	Level
Э.	[MHz]	[dB]	[dBµV/m]	[dBµV/m
1	30	-15.74	40.60	24.86
			o 4 ==	

	Freq.	Factor	Reading	Level	Limit	Margin	Height	Angle	
NO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	30	-15.74	40.60	24.86	40.00	15.14	100	112	Vertical
2	63.013013	-14.48	34.77	20.29	40.00	19.71	100	63	Vertical
3	132.92292	-17.24	34.46	17.22	43.50	26.28	100	22	Vertical
4	167.87787	-17.31	34.65	17.34	43.50	26.16	100	243	Vertical
5	215.45545	-14.72	38.40	23.68	43.50	19.82	100	247	Vertical
6	312.55255	-11.62	38.24	26.62	46.00	19.38	100	170	Vertical
111	10	1 · · · ·		174	201		474		101

Remark: Factor = Cable loss + Antenna factor + Attenuator - Preamplifier; Level = Reading + Factor; Margin = Limit – Level

#### **Harmonics and Spurious Emissions**

#### Frequency Range (9 kHz-30MHz)

Frequency (MHz)	Level@3m (dBµV/m)	Limit@3m (dBµV/m)
HUAN	HUAN	HUAK
	ρ <u>-</u>	TISTING
TING -STING OHUM	TING STING OHU	STAG
UNK TEST	HUAKTES	HUAKTES - HUAK

Note: 1. Emission Level=Reading+ Cable loss+ Antenna factor-Amp factor.

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement.

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### Above 1 GHz Test Results: CH Low (2402MHz)

### Horizontal:

	Meter	HUNKIN	HUNKIN		SAK 12	HUNK
Frequency	Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2402	102.29	-5.84	96.45	114	-17.55	peak
2402	84.92	-5.84	79.08	94	-14.92	AVG
4804	52.94	-3.64	49.3	74	-24.7	peak
4804	43.73	-3.64	40.09	54	-13.91	AVG
7206	50.39	-0.95	49.44	74	-24.56	peak
7206	41.56	-0.95	40.61	54	-13.39	AVG

Margin = Level-Limit.

#### Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2402	103.14	-5.84	97.3	114	-16.7	peak
2402	83.17	-5.84	77.33	94	-16.67	AVG
4804	54.33	-3.64	50.69	74	-23.31	peak
w <sup>0</sup> 4804	43.43	-3.64	39.79	<sup>mio</sup> 54	-14.21	AVG
7206	52.63	-0.95	51.68	74	-22.32	peak
7206	41.33	-0.95	40.38	54	-13.62	AVG

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FICATION

### CH Middle (2440MHz)

### Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2440	101.92	-5.71	96.21	114	-17.79	peak
2440	76.37	-5.71	70.66	94	-23.34	AVG
4880	56.39	-3.51	52.88	74	-21.12	peak
4880	45.12	-3.51	41.61	54	-12.39	AVG
7320	53.72	-0.82	52.9	74	-21.1	peak
7320	43.29	-0.82	42.47	54	-11.53	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

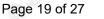
### Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2440	104.89	-5.71	99.18	114	-14.82	peak
2440	79.55	-5.71	73.84	94	-20.16	AVG
4880	53.18	-3.51	49.67	74	-24.33	peak
4880	44.19	-3.51	40.68	54	-13.32	AVG
<sup>66</sup> 7320	52.31	-0.82	51.49	<sup>NG</sup> 74	-22.51	peak
7320	42.08	-0.82	41.26	54	-12.74	AVG

Margin = Level-Limit.

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CH High (2480MHz) Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	dBμV/m)	(dBµV/m)	(dB)	Туре
2480	105.14	-5.65	99.49	114	-14.51	peak
2480	77.99	-5.65	72.34	94	-21.66	AVG
4960	52.26	-3.43	48.83	74	-25.17	peak
4960	44.09	-3.43	40.66	54	-13.34	AVG
7440	50.03	-0.75	49.28	74	-24.72	peak
7440	43.16	-0.75	42.41	54	-11.59	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

#### Vertical:

10	HUPIT	HUPU'	HURD		HUPU	HUP
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2480	106.42	-5.65	100.77	114	-13.23	peak
2480	82.51	-5.65	76.86	94	-17.14	AVG
4960	55.14	-3.43	51.71	74	-22.29	peak
4960	43.42	-3.43	39.99	54	-14.01	AVG
7440	54.29	-0.75	53.54	74	-20.46	peak
7440	40.33	-0.75	39.58	54	-14.42	AVG

Remark :

Margin = Level-Limit.

(1) Measuring frequencies from 1 GHz to the 25 GHz.

(2) "F" denotes fundamental frequency; "H" denotes spurious frequency; "E" denotes band edge frequency.

(3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.

(4)The emissions are attenuated more than 20dB below the permissible limits are not record in the report. (5) The IF bandwidth of EMI Test keyboard between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.

(6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

(7) All modes of operation were investigated and the worst-case emissions are reported.

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#### 5. Band Edge

#### 5.1. Limits

FCC PART 15.249(d) 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 §15.209, whichever is the lesser attenuation.

#### 5.2. Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 1MHz and VBM to 3MHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength.

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#### TING

### PASS

Radiated Band Edge Test: Operation Mode: TX CH Low (2402MHz)

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2310	55.69	-5.81	49.88	74	-24.12	peak
2310	TESTYG O	-5.81	STING / TEST	54	resting	AVG
2390	53.18	-5.84	47.34	74	-26.66	peak
2390	/	-5.84	1	54	/	AVG
2400	52.33	-5.84	46.49	<sup>NG</sup> 74	-27.51	peak
2400	HOM	-5.84	1 HON	54	1	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
2310	56.32	-5.81	50.51	NO 74	-23.49	peak
2310	HUAKIL	-5.81	HUAKIL	54	When I	AVG
۵390 م	55.12	-5.84	49.28	74	-24.72	peak
2390	TESTING /	-5.84	KTESTING	54	/	AVG
2400	51.79	-5.84	45.95	74	-28.05	peak
2400	1	-5.84	/	54	/	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

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### Operation Mode: TX CH High (2480MHz) Horizontal

**IUAK TESTING** 

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	NUAK TEST
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.50	54.29	-5.65	48.64	74	-25.36	peak
2483.50	/	-5.65	O HUM	54	1	AVG
2500.00	51.33	-5.65	45.68	74	-28.32	peak
2500.00	JUNK TESTING	-5.65	TSTING / JAKTES	54	TESTING	AVG

Vertical:

Frequency	Reading Result	Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
2483.50	55.23	-5.65	49.58	74	-24.42	peak
2483.50	TESTIG OH	-5.65	STING /	54	/ sting	AVG
2500.00	51.46	-5.65	45.81	74	-28.19	peak
2500.00	/	-5.65	/	54	/	AVG

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark: All the other emissions not reported were too low to read and deemed to comply with FCC limit.

Remark:

1. If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

2. In restricted bands of operation, the spurious emissions below the permissible value more than 20dB.

3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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- 6. Occupied Bandwidth Measurement
- 6.1. Test Setup Same as Radiated Emission Measurement
- 6.2. Test Procedure
  - 1. The EUT was placed on a turn table which is 0.8m above ground plane.
  - 2. Set EUT as normal operation.
  - 3. Based on ANSI C63.10 section 6.9.2: RBW= 20KHz. VBW=62 KHz, Span=5MHz.
  - 4. The useful radiated emission from the EUT was detected by the spectrum analyzer with peak detector.

#### 6.3. Measurement Equipment Used

Same as Radiated Emission Measurement

#### 6.4. Test Result

#### PASS

20dB Bandwidth (MHz)	Result
1.827	PASS
2.005	PASS
2.013	PASS
	(MHz) 1.827 2.005

#### CH: 2402MHz



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### CH: 2440MHz



CH: 2480MHz



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## **HUAK TESTING**

#### 7. Antenna Requirement

#### **Standard Applicable**

For intentional device, according to FCC 47 CFR Section 15.203, 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.

#### Antenna Connected Construction

The antenna used in this product is a PCB Antenna, which permanently attached. It conforms to the standard requirements. The directional gains of antenna used for transmitting is -0.86dBi.





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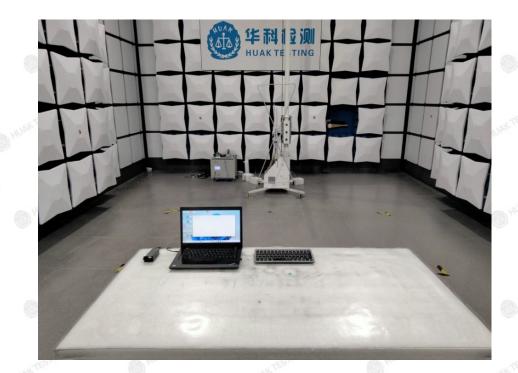


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#### Report No.: HK2408194734-E

### 8. Photograph of Test

Radiated Emission





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DAT.

### 9. Photos of the EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos.

----End of test report-----

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