

# Shenzhen HTT Technology Co., Ltd.

Report No.: HTT202202263F03

# **TEST Report**

Applicant: Shenzhen Youchangshumadianzi Youxiangongsi

Address of Applicant: Xixiangjiedao Shuikulu Zhongxi ECOguoji 316-318

ShenzhenShi Baoanqu Guangdong 518000

Manufacturer: Shenzhen Youchangshumadianzi Youxiangongsi

Address of Xixiangjiedao Shuikulu Zhongxi ECOguoji 316-318

Manufacturer: ShenzhenShi Baoangu Guangdong 518000

**Equipment Under Test (EUT)** 

Product Name: android screen

Model No.: KS-H908Q

Series model: KS-927QH, KS-922Q, KS-920Q, KS-918Q, KS-919Q,

KS-908Q, KS-925H, KS-908QH, KS-924QH, KS-H925Q,

KS-923Q,KS-907Q,KS-906Q,KS-905Q, KS-H920Q,

UB-B940, UB-B945, UB-B950, UB-6901, UB-7901, UB-8901

Trade Mark: Koason, Ugode

FCC ID: 2A4LBKS-H908Q

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: Feb.08,2022

**Date of Test:** Feb.08,2022- Feb.22,2022

Date of report issued: Feb.22,2022

Test Result: PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.



# 1. Version

Version No.	Date	Description
00	Feb.22,2022	Original

Tested/ Prepared By	Ervin Xu	Date:	Feb.22,2022
	Project Engineer		
Check By:	Bruce 2hu	Date:	Feb.22,2022
	Reviewer		
Approved By :	Kerin Yang	Date:	Feb.22,2022
	Authorized Signature	<del>-</del>	



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3. Test Summary

		1
Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	N/A
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Remark: Test according to ANSI C63.10:2013 and RSS-Gen

Pass: The EUT complies with the essential requirements in the standard.

# **Measurement Uncertainty**

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	3.45 dB	(1)
Radiated Emission	1~6GHz	3.54 dB	(1)
Conducted Disturbance	0.15~30MHz	2.66 dB	(1)
Note (1): The measurement unce	ertainty is for coverage factor of k	=2 and a level of confidence of 9	95%.



# 4. General Information

# 4.1. General Description of EUT

iiii Gonorai Booonpiion oi Eo	
Product Name:	android screen
Model No.:	KS-H908Q
Series model:	KS-927QH, KS-922Q, KS-920Q, KS-918Q, KS-919Q, KS-908Q, KS-925H, KS-908QH, KS-924QH, KS-H925Q, KS-923Q,KS-907Q,KS-906Q, KS-905Q, KS-H920Q, UB-B940, UB-B945, UB-B950, UB-6901, UB-7901, UB-8901
Model Difference	All the model are the same circuit and RF module, except the model name colour and display size.
Channel numbers:	802.11b/802.11g /802.11n(HT20): 11 802.11n(HT40):7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(H20)/802.11n(HT40): Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	FPCB Antenna
Antenna gain:	1.0dBi
Power supply:	DC 12V From External Circuit
Adapter Information (auxiliary test equipment supplied by test Lab)	N/A



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

<b>-</b>	Frequency (MHz)			
Test channel	802.11b/802.11g/802.11n(HT20)	802.11n(HT40)		
Lowest channel	2412MHz	2422MHz		
Middle channel	2437MHz	2437MHz		
Highest channel	2462MHz	2452MHz		



#### 4.2. Test mode

Transmitting mode Keep the EUT in continuously transmitting mode

Remark: During the test, the dutycycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	!	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
Data ra	te	1Mbps	6Mbps	6.5Mbps	13Mbps

#### 4.3. Description of Support Units

None.

#### 4.4. Deviation from Standards

None.

#### 4.5. Abnormalities from Standard Conditions

None.

#### 4.6. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### FCC-Registration No.: 779513 Designation Number: CN1319

Shenzhen HTT Technology Co.,Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

#### A2LA-Lab Cert. No.: 6435.01

Shenzhen HTT Technology Co.,Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

#### 4.7. Test Location

All tests were performed at:

Shenzhen HTT Technology Co.,Ltd.

1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road, Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China

Tel: 0755-23595200 Fax: 0755-23595201

#### 4.8. Additional Instructions

Test Software	Special AT test command provided by manufacturer to Keep the EUT in continuously transmitting mode and hopping mode
Power level setup	Default



# 5. Test Instruments list

Item	Test Equipment	Manufacturer	Model No.	Inventory	Cal.Date	Cal.Due date
				No.	(mm-dd-yy)	(mm-dd-yy)
1	3m Semi- Anechoic Chamber	Shenzhen C.R.T technology co., LTD	9*6*6	HTT-E028	Aug. 10 2020	Aug. 09 2024
2	Control Room	Shenzhen C.R.T technology co., LTD	4.8*3.5*3.0	HTT-E030	Aug. 10 2020	Aug. 09 2024
3	EMI Test Receiver	Rohde&Schwar	ESCI7	HTT-E022	May 21 2021	May 20 2022
4	Spectrum Analyzer	Rohde&Schwar	FSP	HTT-E037	May 21 2021	May 20 2022
5	Coaxial Cable	ZDecl	ZT26-NJ-NJ-0.6M	HTT-E018	May 21 2021	May 20 2022
6	Coaxial Cable	ZDecl	ZT26-NJ-SMAJ-2M	HTT-E019	May 21 2021	May 20 2022
7	Coaxial Cable	ZDecl	ZT26-NJ-SMAJ-0.6M	HTT-E020	May 21 2021	May 20 2022
8	Coaxial Cable	ZDecl	ZT26-NJ-SMAJ-8.5M	HTT-E021	May 21 2021	May 20 2022
9	Composite logarithmic antenna	Schwarzbeck	VULB 9168	HTT-E017	Aug. 22 2021	Aug. 21 2022
10	Horn Antenna	Schwarzbeck	BBHA9120D	HTT-E016	Aug. 22 2021	Aug. 21 2022
11	Loop Antenna	Zhinan	ZN30900C	HTT-E039	Aug. 22 2021	Aug. 21 2022
12	Horn Antenna	l Beijing Hangwei Dayang	OBH100400	HTT-E040	Aug. 22 2021	Aug. 21 2022
13	low frequency Amplifier	Sonoma Instrument	310	HTT-E015	May 21 2021	May 20 2022
14	high-frequency Amplifier	HP	8449B	HTT-E014	May 21 2021	May 20 2022
15	Variable frequency power supply	Shenzhen Anbiao Instrument Co., Ltd	ANB-10VA	HTT-082	May 21 2021	May 20 2022
16	EMI Test Receiver	Rohde & Schwarz	ESCS30	HTT-E004	May 21 2021	May 20 2022
17	Artificial Mains	Rohde & Schwarz	ESH3-Z5	HTT-E006	May 21 2021	May 20 2022
18	Artificial Mains	Rohde & Schwarz	ENV-216	HTT-E038	May 21 2021	May 20 2022
19	Cable Line	Robinson	Z302S-NJ-BNCJ-1.5M	HTT-E001	May 21 2021	May 20 2022
20	Attenuator	Robinson	6810.17A	HTT-E007	May 21 2021	May 20 2022
21	Variable frequency power supply	Shenzhen Yanghong Electric Co., Ltd	YF-650 (5KVA)	HTT-E032	May 21 2021	May 20 2022
22	Control Room	Shenzhen C.R.T technology co., LTD	8*4*3.5	HTT-E029	May 21 2021	May 20 2022
23	DC power supply	Agilent	E3632A	HTT-E023	May 21 2021	May 20 2022
24	EMI Test Receiver	Agilent	N9020A	HTT-E024	May 21 2021	May 20 2022
25	Analog signal generator	Agilent	N5181A	HTT-E025	May 21 2021	May 20 2022
26	Vector signal generator	Agilent	N5182A	HTT-E026	May 21 2021	May 20 2022
27	Power sensor	Keysight	U2021XA	HTT-E027	May 21 2021	May 20 2022
28	Temperature and humidity meter	Shenzhen Anbiao Instrument Co., Ltd	TH10R	HTT-074	May 21 2021	May 20 2022



# 6. Test results and Measurement Data

# 6.1. Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz	150KHz to 30MHz				
Class / Severity:	Class B					
Receiver setup:	RBW=9KHz, VBW=30KHz, S	Sweep time=auto				
Limit:	Fragueray range (MIII-)	Limit	t (dBuV)			
	Frequency range (MHz)		erage			
	0.15-0.5	66 to 56*		o 46*		
	0.5-5	56		46		
	5-30 * Decreases with the logarith	m of the frequency	;	50		
Test setup:	Reference Plan	•				
Test procedure:	Remark E.U.T  Test table/Insulation plane  Remark E.U.T. Equipment Under Test LISN Line Impedence Stabilization Network Test table height=0.8m  1. The E.U.T and simulators line impedance stabilization 500hm/50uH coupling imp	EMI Receiver  are connected to the on network (L.I.S.N.). nedance for the meas	This provide uring equipn	es a nent.		
	<ol> <li>The peripheral devices are LISN that provides a 50oh termination. (Please refer photographs).</li> <li>Both sides of A.C. line are interference. In order to fir positions of equipment an according to ANSI C63.10</li> </ol>	m/50uH coupling imp to the block diagram checked for maximund the maximum emised all of the interface of	pedance with of the test so am conducter ssion, the rel cables must	a 50ohm etup and d ative be changed		
Test Instruments:	Refer to section 6.0 for detail	s				
Test mode:	Refer to section 5.2 for detail	s				
Test environment:	Temp.: 25 °C Hu	mid.: 52%	Press.:	1012mbar		
Test voltage:	AC 120V, 60Hz					
Test results:	N/A					



# 6.2. Conducted Peak Output Power

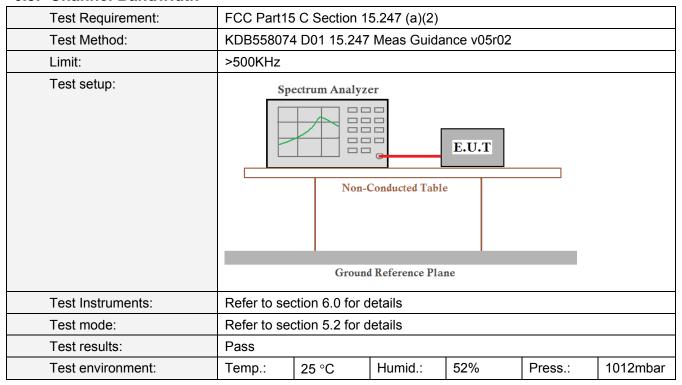
Test Requirement:	FCC Part15	C Section 1	5.247 (b)(3)					
Test Method:	KDB558074	4 D01 15.247	Meas Guida	ance v05r02				
Limit:	30dBm	30dBm						
Test setup:	Power sensor and S	Non-Conducted Tabl						
Test Instruments:	Refer to see	ction 6.0 for d	letails					
Test mode:	Refer to see	ction 5.2 for d	letails					
Test results:	Pass							
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar		

#### **Measurement Data**

		Peak Outp	ut Power (dBm)				
Test CH	802.11b	802.11g 802.11n(HT20) 802.		802.11n(HT40)	Limit(dBm)	Result	
Lowest	15.87	15.24	14.77	13.02			
Middle	15.64	15.02	14.25	13.01	30.00	Pass	
Highest	15.43	15.16	14.16	12.88			



#### 6.3. Channel Bandwidth



#### **Measurement Data**

		Channel E		_			
Test CH	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	Limit(KHz)	Result	
Lowest	8.580	16.40	17.60	36.04			
Middle	8.100	16.40	17.61	35.78	>500	Pass	
Highest	8.119	16.40	17.60	35.81			



## Test plot as follows:

#### 802.11b

# Center Freq 2.41200000 GHz Genter Freq 2.41200000 GHz ### Gaint on Freq 2.4120000 GHz ### Gaint on Freq 2.4120000 GHz ### Gaint on Freq 2.41200000 GHz ### Gaint on Freq 2.4120000 GHz ### Gaint on Freq 2.4120000 GHz ### Gaint on Freq 2.412000 GHz ### Gaint on Freq 2.4120

#### 802.11g

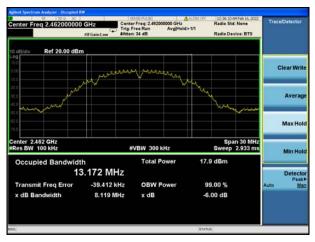


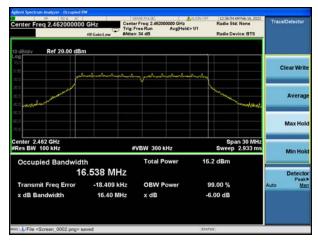
#### Lowest channel





#### Middle channel

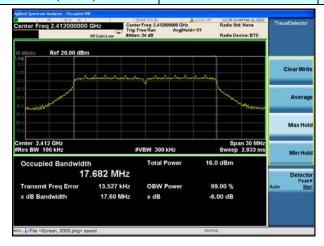




Highest channel



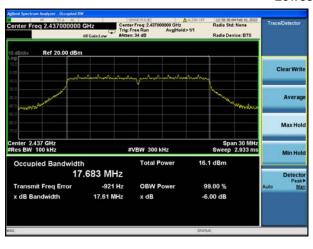
#### 802.11n(HT20)

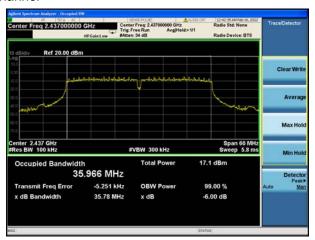


#### 802.11n(HT40)

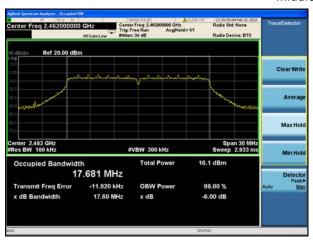


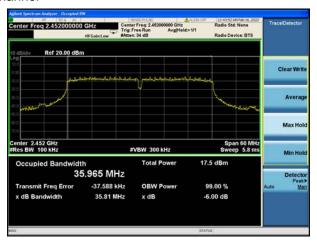
#### Lowest channel





#### Middle channel

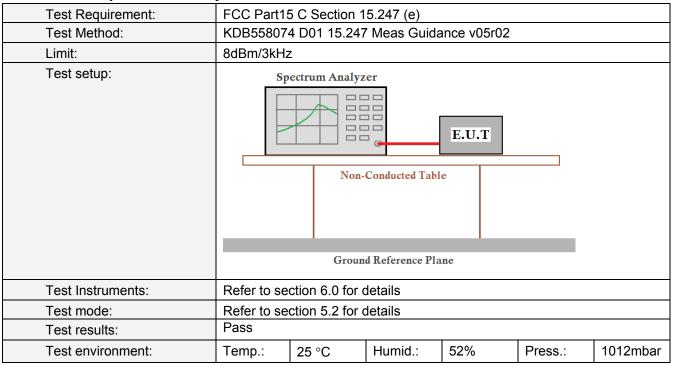




Highest channel



#### 6.4. Power Spectral Density



#### **Measurement Data**

		Power Spectra	al Density (dBm/3kl	Hz)	Limit	
Test CH	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	(dBm/3kHz)	Result
Lowest	-11.381	-17.315	-17.045	-19.849		
Middle	-12.342	-15.822	-15.359	-19.202	8.00	Pass
Highest	-11.614	-16.084	-17.195	-20.247		

Remark: We have tested all mode at high, middle and low channel, and recorded worst case at middle



#### Test plot as follows:

#### 802.11b

# ### Add ### Ad

# 802.11g



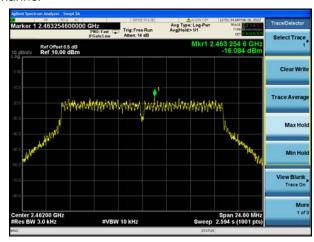
#### Lowest channel





#### Middle channel

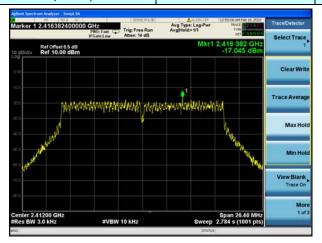




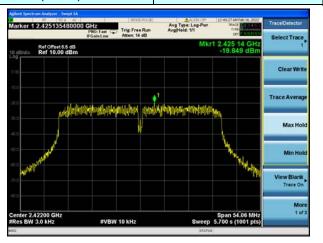
Highest channel



#### 802.11n(HT20)

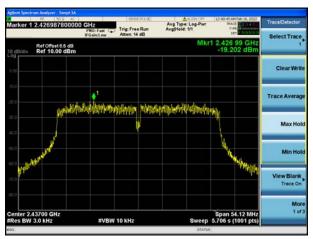


#### 802.11n(HT40)

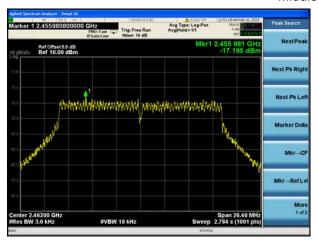


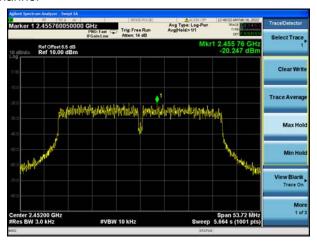
#### Lowest channel





#### Middle channel





Highest channel



# 6.5. Band Edge

# 6.5.1. Conducted Emission Method

Test Requirement:	FCC Part15	C Section 1	5.247 (d)				
Test Method:	KDB558074	4 D01 15.247	Meas Guida	nce v05r02			
Limit:	spectrum ir is produced the 100 kH the desired	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spec		E.U ucted Table	т			
Test Instruments:	Refer to se	ction 6.0 for d	letails				
Test mode:	Refer to se	ction 5.2 for d	letails				
Test results:	Pass	Pass					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar	

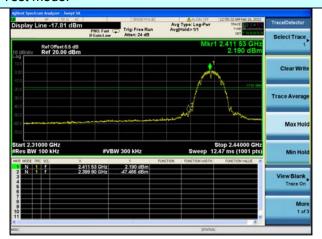


Frequency Band	Delta Peak to band emission	>Limit	Result					
	(dBc)	(dBc)						
	802.11b							
2400	49.66	20	Pass					
2483.5	58.50	20	Pass					
802.11g								
2400	35.76	20	Pass					
2483.5	48.97	20	Pass					
	802.11n(HT20	)						
2400	34.87	20	Pass					
2483.5	46.15	20	Pass					
	802.11n(HT40	)						
2400	33.99	20	Pass					
2483.5	42.16	20	Pass					



# Test plot as follows:

#### Test mode:



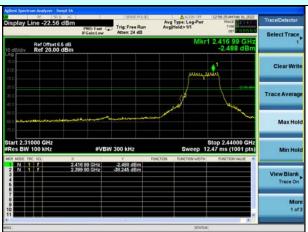
802.11b



Lowest channel

Highest channel





802.11g



Lowest channel

Highest channel





Lowest channel Highest channel



Lowest channel Highest channel



#### 6.5.2. Radiated Emission Method

Test Pequirement:	FCC Part15	C Section 1	5.209 a	nd 15	205			
Test Requirement: Test Method:	ANSI C63.10: 2013							
Test Frequency Range:			were t	ested	only the wo	orst band's (2	2310MHz to	
rest Fieduency Kange.		data was sho		ootou,	only the we	not band o (2	.010111112 10	
Test site:	Measurement Distance: 3m							
Receiver setup:	Frequency Detector RBW VBW				mark			
	Above 1GI	Hz Pea		1MF			Value	
I insta	Erc	equency		1MF	<u>lz   10Hz</u> BuV/m @3m		ge Value mark	
Limit:					54.00	<i>'</i>	ge Value	
	Abo	ve 1GHz			74.00		k Value	
Test setup:	Turn Table (150 cm > 4)  Parity of December 150 cm							
Test Procedure:	1 The FUT	was nlaced				ole 1.5 meter	s above the	
	<ol> <li>The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or</li> </ol>							
Test Instruments:	Refer to sec	ction 6.0 for c	letails					
Test mode:	Refer to section 5.2 for details							
Test results:	Pass							
Test environment:	Temp.:	25 °C	Humid	d.:	52%	Press.:	1012mbar	



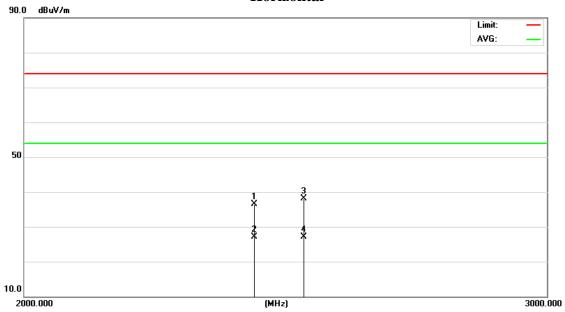
#### **Measurement Data**

Remark: During the test, pre-scan the 802.11b/802.11g/802.11n (H20)/802.11n (H40) modulation, and found the 802.11b modulation which it is worse case.

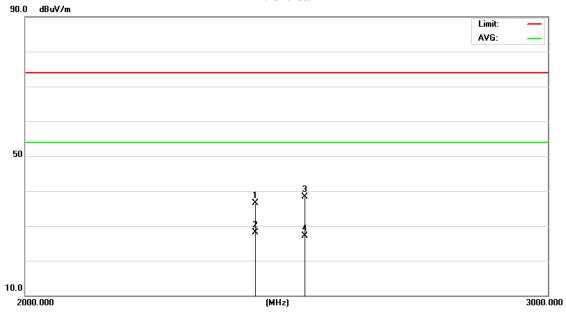
		Rea	ding		А	ct	Lir	mit	
Freq. (MHz)	Ant.Pol. H/V	Peak (dBuv)	AV (dBuv)	Ant/CF CF(dB)	Peak (dBuv/m)	AV (dBuv/m)	Peak (dBuv/m)	AV (dBuv/m)	Note
		, ,			,	,		(* - /	
2390.00	Н	42.57	32.38	-5.79	36.78	26.59	74.00	54.00	CH01
2390.00	V	42.98	34.06	-5.79	37.19	28.27	74.00	54.00	CH01
2483.50	Н	43.11	32.18	-4.98	38.13	27.20	74.00	54.00	CH11
2483.50	V	43.39	32.06	-4.98	38.41	27.08	74.00	54.00	CH11



#### Horizontal



# Vertical





# 6.6. Spurious Emission

# 6.6.1. Conducted Emission Method

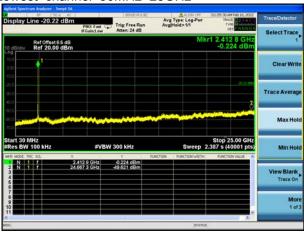
Test Requirement:	FCC Part15	FCC Part15 C Section 15.247 (d)							
Test Method:	KDB558074	4 D01 15.247	Meas Guida	nce v05r02					
Limit:	spectrum ir is produced the 100 kH	ntentional rac I by the inten z bandwidth d power, ba	liator is operational radiato within the ba	e frequency bating, the rac r shall be at land that cont er an RF co	lio frequency least 20 dB b ains the high	power that below that in hest level of			
Test setup:	Sp	Non-4							
Test Instruments:	Refer to see	ction 6.0 for o	letails						
Test mode:	Refer to see	ction 5.2 for o	letails						
Test results:	Pass								
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar			

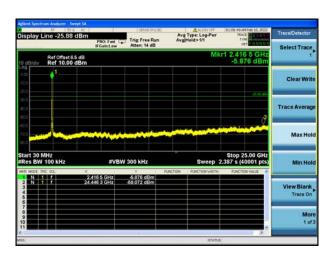


#### **Measurement Data:**

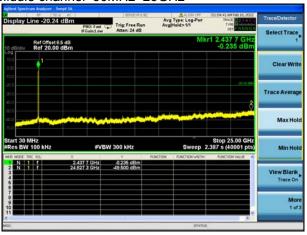
802.11b 802.11g

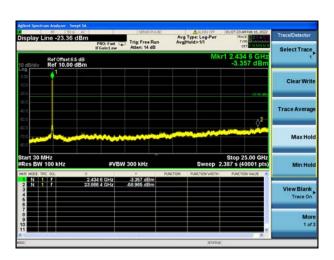
#### Lowest channel 30MHz~25GHz



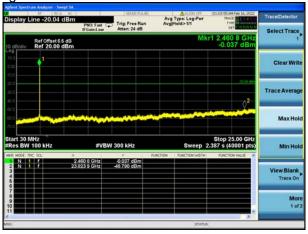


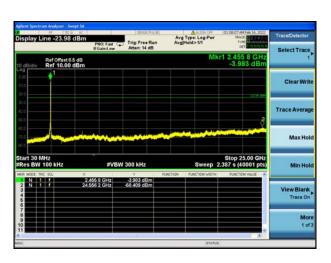
#### Middle channel 30MHz~25GHz





#### Highest channel 30MHz~25GHz





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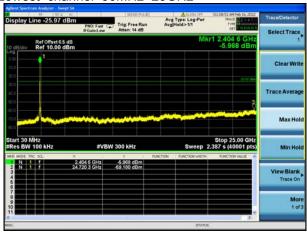
<sup>1</sup>F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road, Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China

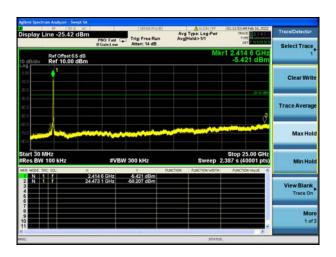


#### 802.11n(HT20)

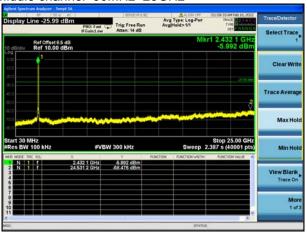
#### 802.11n(HT40)

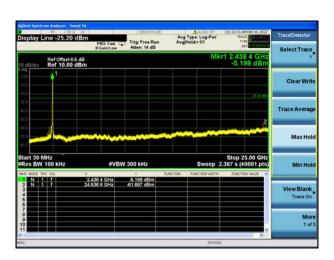
# Lowest channel 30MHz~25GHz



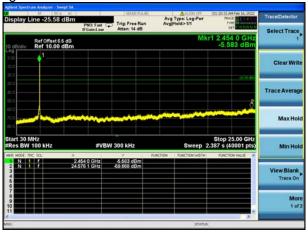


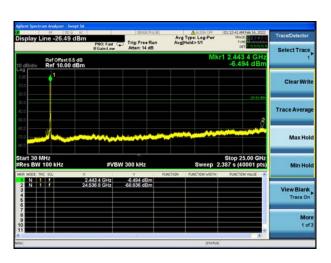
#### Middle channel 30MHz~25GHz





#### Highest channel 30MHz~25GHz





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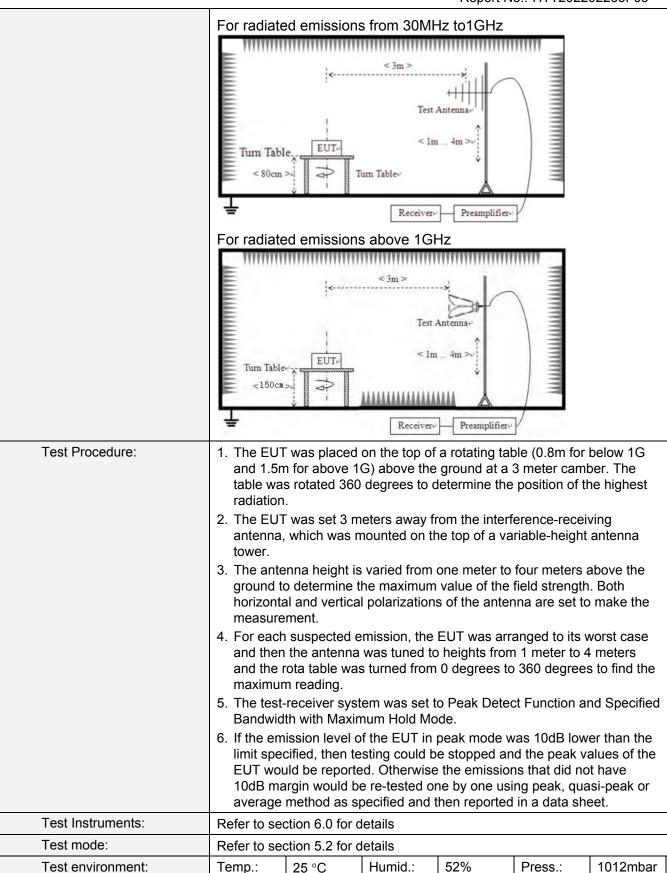
<sup>1</sup>F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road, Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China



# 6.6.2. Radiated Emission Method

Test Requirement:	FCC Part15 C Section	on 18	5.209						
Test Method:	ANSI C63.10:2013								
Test Frequency Range:	9kHz to 25GHz								
Test site:	Measurement Distance: 3m								
Receiver setup:	Frequency		Detector RBV		W VBW		1	Value	
	9KHz-150KHz	Q	uasi-peak 200H		Hz	600H	Z	Quasi-peak	
	150KHz-30MHz	ă	ıasi-peak	9KF	Ηz	30KH	Z	Quasi-peak	
	30MHz-1GHz	Qi	ıasi-peak	120K	Ήz	300KF	łz	Quasi-peak	
	Above 1GHz		Peak	1MF	Ηz	3MHz	Z	Peak	
	Above Toriz		Peak	1MF	Ηz	10Hz	<u>-</u>	Average	
Limit:	Frequency Limit (uV/m) Value				'alue	N	Measurement Distance		
	0.009MHz-0.490M	2400/F(k	(Hz)		QP		300m		
	0.490MHz-1.705M	24000/F(	KHz)		QP		30m		
	1.705MHz-30MH	1.705MHz-30MHz			QP		30m		
	30MHz-88MHz		100			QP			
	88MHz-216MHz		150			QP			
	216MHz-960MH	Z	200		QP		3m		
	960MHz-1GHz		500		QP			OIII	
	Above 1GHz		500		Average				
	7.5575 15112		5000		F	Peak			
Test setup:	For radiated emiss	ions	from 9kH	z to 30	)MH	Z			
	= *************************************	77777	*********	*****	111111	*****	1		
	Tum Table EUT	7	< 3m > Test A	nntenna lm Receiver					





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Test voltage:	AC 120V, 60Hz
Test results:	Pass

#### Remarks:

- 1. Only the worst case Main Antenna test data.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

#### Measurement data:

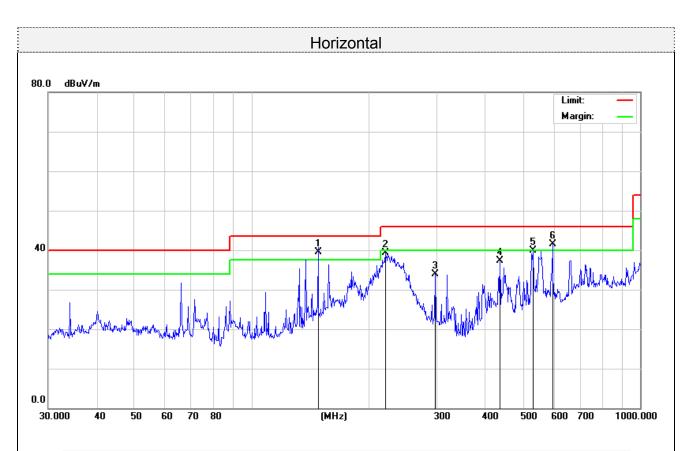
#### ■ 9kHz~30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.



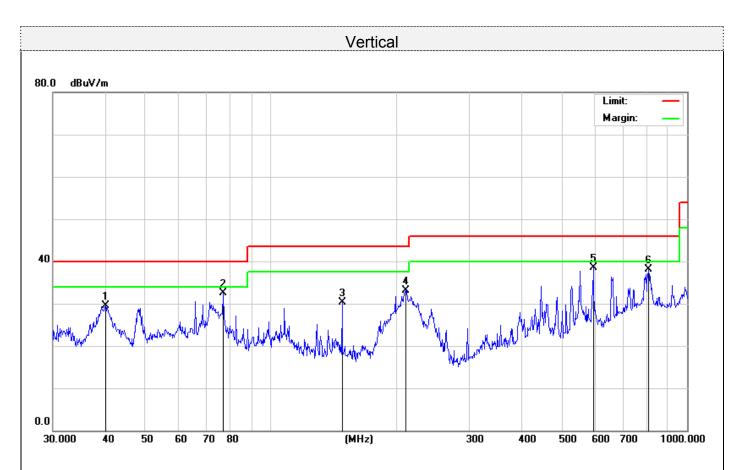
#### ■ Below 1GHz

Pre-scan all test modes, found worst case at 802.11b 2437MHz, and so only show the test result of 802.11b 2437MHz



No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector
1	*	148.4878	46.33	-6.77	39.56	43.50	-3.94	QP
2		221.3921	46.00	-6.72	39.28	46.00	-6.72	peak
3		297.2241	42.54	-8.59	33.95	46.00	-12.05	peak
4		435.5898	38.09	-0.88	37.21	46.00	-8.79	peak
5		530.1014	35.81	4.02	39.83	46.00	-6.17	peak
6	ļ	595.1329	37.14	4.33	41.47	46.00	-4.53	peak





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector
1		40.1347	33.69	-4.20	29.49	40.00	-10.51	peak
2	*	76.7808	43.22	-10.64	32.58	40.00	-7.42	peak
3		148.4410	37.88	-7.51	30.37	43.50	-13.13	peak
4	2	210.7860	37.10	-3.97	33.13	43.50	-10.37	peak
5	į	595.1329	35.69	2.75	38.44	46.00	-7.56	peak
6	3	307.4291	30.51	7.54	38.05	46.00	-7.95	peak



#### ■ Above 1GHz

Note: During the test, pre-scan the 802.11b/802.11g/802.11n (H20)/802.11n (H40) modulation, and found the 802.11b modulation which it is worse case.

802.11b:Lowest

### Horizontal:

Frequency	Meter Reading	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4824	50.66	31.40	8.18	31.50	58.74	74.00	-15.26	peak
4824	32.21	31.40	8.18	31.50	40.29	54.00	-13.71	AVG
7236	43.02	35.80	10.83	31.40	58.25	74.00	-15.75	peak
7236	27.42	35.80	10.83	31.40	42.65	54.00	-11.35	AVG

# Vertical:

Frequency	Meter Reading	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limits	Margin	
, ,								Detector
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
4824	49.88	31.40	8.18	31.50	57.96	74.00	-16.04	peak
4824	34.16	31.40	8.18	31.50	42.24	54.00	-11.76	AVG
7236	42.88	35.80	10.83	31.40	58.11	74.00	-15.89	peak
7236	28.51	35.80	10.83	31.40	43.74	54.00	-10.26	AVG
Remark: Fact	or = Antenna Fac	tor + Cable Los	ss – Pre-amplifie	er.				



# 802.11b:Middle

#### Horizontal:

Frequency	Meter Reading	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874	50.12	31.40	9.17	32.10	58.59	74.00	-15.41	peak
4874	35.05	31.40	9.17	32.10	43.52	54.00	-10.48	AVG
7311	42.27	35.80	10.83	31.40	57.50	74.00	-16.50	peak
7311	28.16	35.80	10.83	31.40	43.39	54.00	-10.61	AVG

# Vertical:

		Antenna		Preamp				
Frequency	Meter Reading	Factor	Cable Loss	Factor	Emission Level	Limits	Margin	1
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4874	49.66	31.40	9.17	32.10	58.13	74.00	-15.87	peak
4874	34.25	31.40	9.17	32.10	42.72	54.00	-11.28	AVG
7311	42.78	35.80	10.83	31.40	58.01	74.00	-15.99	peak
7311	27.78	35.80	10.83	31.40	43.01	54.00	-10.99	AVG



### 802.11b:Highest

#### Horizontal:

Frequency	Meter Reading	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limits	Margin	
Frequency	Meter Reading	Factor	Cable Loss	Factor	EIIIISSIOII LEVEI	LIIIIII	iviargiri	Detector
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре
4924	49.77	31.40	9.17	32.10	58.24	74	-15.76	peak
4924	33.21	31.40	9.17	32.10	41.68	54	-12.32	AVG
7386	42.28	35.80	10.83	31.40	57.51	74	-16.49	peak
7386	27.49	35.80	10.83	31.40	42.72	54	-11.28	AVG
Remark: Facto	or = Antenna Fac	ctor + Cable Los	ss – Pre-amplific	er.				

#### Vertical:

Frequency	Meter Reading	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limits	Margin	
(MHz)	(dBµV)	(dB/m)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
4924	48.59	31.40	9.17	32.10	57.06	74	-16.94	peak
4924	33.64	31.40	9.17	32.10	42.11	54	-11.89	AVG
7386	42.98	35.80	10.83	31.40	58.21	74	-15.79	peak
7386	27.85	35.80	10.83	31.40	43.08	54	-10.92	AVG
Remark: Fact	or = Antenna Fac	ctor + Cable Los	ss – Pre-amplifie	er.				

#### Remark

<sup>(1)</sup> Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

<sup>(2)</sup> When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed.



# 7. Test Setup Photo

Reference to the **appendix I** for details.

# 8. EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----