

TEST REPORT

Report No. ·····:	KS2204S1365E02		
FCC ID······:	2AO94-LW001BGPRO		
Applicant······:	MOKO TECHNOLOGY LIM	IITED	
Address	Factory 201, 107 Pinshun F Longhua , Shenzhen,China	Rd Guixiang community, Guanlan Street, 518110	
Manufacturer······	MOKO TECHNOLOGY LIM	IITED	
Address······	Factory 201, 107 Pinshun F Longhua , Shenzhen,China	Rd Guixiang community, Guanlan Street, 518110	
Product Name·····:	Smart Tracker		
Trade Mark······:	N/A		
Model/Type reference······:	LW001-BG PRO		
Listed Model(s) ······	N/A		
Standard:	FCC CFR Title 47 Part 15 Subpart C Section 15.247		
Date of receipt of test sample:	April 09, 2022		
Date of testing	April 09, 2022~May 09, 202	2	
Date of issue	May 09, 2022		
Result:	PASS		
prepare by: (Printed Name + Signature)	Sky dong	shy dang	
Approved by:		Noil Wan	
(Printed Name + Signature)	Neil Wan	/ren own	
Testing Laboratory Name······: Address	West Side of 1/E Building C Zone A Euviran New Eastory Juliu		

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TRF No. FCC Part 15.247_R1

Add:West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



TABLE OF CONTENTS

Page

1.TEST SUMMARY	
1.1. TEST STANDARDS	
1.2. REPORT VERSION	
1.3. TEST DESCRIPTION	
1.4. TEST FACILITY	
1.5. MEASUREMENT UNCERTAINTY	
1.6. ENVIRONMENTAL CONDITIONS	6
2. GENERAL INFORMATION	7
2.1. GENERAL DESCRIPTION OF EUT	7
2.2. OPERATION STATE	
2.3. MEASUREMENT INSTRUMENTS LIST	9
2.4. TEST SOFTWARE	10
3. TEST ITEM AND RESULTS	
3.1. ANTENNA REQUIREMENT	
3.2. PEAK OUTPUT POWER	
3.3. POWER SPECTRAL DENSITY	14
3.4. BANDWIDTH	21
3.5. BAND EDGE AND SPURIOUS EMISSION (CONDUCTED)	
3.6. BAND EDGE EMISSIONS(RADIATED)	
3.7. SPURIOUS EMISSION (RADIATED)	
3.8. CONDUCTED EMISSION	50
4. EUT TEST PHOTOS	52
5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL	53



1.TEST SUMMARY

1.1. TEST STANDARDS

The tests were performed according to following standards:

FCC Rules Part 15.247: Operation within the bands of 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

KDB 558074 D01 : The measurement guidance provided herein is applicable only to Digital Transmission System (DTS) devices operating in the 902-928 MHz. 2400-2483.5 MHz and/or 5725-5850 MHz bands under §15.247 of the FCC rules (Title 47 of the Code of Federal Regulations).

1.2. REPORT VERSION

Revised No.	Date of issue	Description
01	May 09, 2022	Original

TRF No. FCC Part 15.247_R1



1.3. TEST DESCRIPTION

FCC Part 15 Subpart C(15.247)				
Tood House	Standard Section	Decel	Test Engineer	
Test Item	FCC	Result		
Antenna Requirement	15.203	Pass	Allen Li	
Conducted Emission	15.207	N/A	Allen Li	
6dB&99% Bandwidth	15.247(a)(2)	Pass	Allen Li	
Peak Output Power	15.247(b)	Pass	Allen Li	
Power Spectral Density	15.247(e)	Pass	Allen Li	
Restricted Band	15.247(d)/15.205	Pass	Allen Li	
Band Edge and Spurious Emission(Conducted)	15.247(d)	Pass	Allen Li	
Spurious Emission(Radiated)	15.247(d)&15.209	Pass	Allen Li	

Note: The measurement uncertainty is not included in the test result.

TRF No. FCC Part 15.247_R1



Address of the report laboratory

KSIGN(Guangdong) Testing Co., Ltd.

West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Laboratory accreditation

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

CNAS-Lab Code: L13261

KSIGN(Guangdong) Testing Co., Ltd. has been assessed and proved to be in Compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No.: 5457.01

KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

IC Registration No.: CN0096

The 3m alternate test site of KSIGN(Guangdong) Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: CN0096

FCC-Registration No.: CN1272

KSIGN(Guangdong) Testing Co., Ltd. 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.



1.5. MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the KSIGN(Guangdong) Testing Co., Ltd. system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device. Below is the best measurement capability for KSIGN(Guangdong) Testing Co., Ltd.

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.42 dB	(1)
Transmitter power Radiated	2.14 dB	(1)
Conducted spurious emissions 9kHz~40GHz	1.60 dB	(1)
Radiated spurious emissions 9kHz~40GHz	2.20 dB	(1)
Conducted Emissions 9kHz~30MHz	3.20 dB	(1)
Radiated Emissions 30~1000MHz	4.70 dB	(1)
Radiated Emissions 1~18GHz	5.00 dB	(1)
Radiated Emissions 18~40GHz	5.54 dB	(1)
Occupied Bandwidth	2.80 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

1.6. ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
Relative Humidity:	30~60 %
Air Pressure:	950~1050mba

TRF No. FCC Part 15.247_R1

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2. GENERAL INFORMATION

2.1. GENERAL DESCRIPTION OF EUT

Test Sample Number:	1-1-1(Normal Sample),1-1-2(Engineering Sample)
Product Name:	Smart Tracker
Trade Mark:	N/A
Model/Type reference:	LW001-BG PRO
Listed Model(s):	N/A
Model Different:	N/A
Power supply(Adapter):	N/A
Power supply(Battery):	DC 3.65V From Battery
Hardware version:	LW001_BG_V2.4
Software version:	V1.0
2.4GHz WIFI	
Modulation:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK,QPSK,16QAM,64QAM)
Operation frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz
Max Peak Output Power:	802.11b: 9.14 dBm 802.11g: 9.50 dBm 802.11n (HT20): 9.36 dBm
Channel number:	802.11b/g/n(HT20):11 channels
Test frequency:	CH01: 2412MHz; CH06: 2437MHz;CH11: 2462MHz
Channel separation:	5MHz
Antenna type:	PCB Antenna
Antenna gain:	3.77 dBi

TRF No. FCC Part 15.247_R1

Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



2.2. OPERATION STATE

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

Operation Frequency List:

Channel	Frequency (MHz)
01	2412
02	2417
03	2422
04	2427
05	2432
06	2437
07	2442
08	2447
09	2452
10	2457
11	2462

Note:

1.CH 01~CH 11 for 802.11b/g/n(HT20).

2. The display in grey were the channel selected for testing.

Test mode

For RF test items

The engineering test program was provided and enabled to make EUT continuous transmit (duty cycle>98%).

For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit(duty cycle>98%). The EUT in each of three orthogonal axis emissions had been tested ,but only the worst case (X axis) data Recorded in the report.

TRF No. FCC Part 15.247_R1

Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



2.3. MEASUREMENT INSTRUMENTS LIST

	Tonscend JS0806-2 Test system				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
1	Spectrum Analyzer	R&S	FSV40-N	101798	04/07/2022
2	Vector Signal Generator	Agilent	N5182A	MY50142520	04/07/2022
3	Analog Signal Generator	HP	83752A	3344A00337	04/07/2022
4	Power Sensor	Agilent	E9304A	MY50390009	04/07/2022
5	Power Sensor	Agilent	E9300A	MY41498315	04/07/2022
6	Wideband Radio Communication Tester	R&S	CMW500	157282	04/07/2022
7	Climate Chamber	Angul	AGNH80L	1903042120	04/07/2022
8	Dual Output DC Power Supply	Agilent	E3646A	MY40009992	04/07/2022
9	RF Control Unit	Tonscend	JS0806-2	/	04/07/2022

	Transmitter spurious emissions & Receiver spurious emissions				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
1	EMI Test Receiver	R&S	ESR	102525	04/07/2022
2	High Pass Filter	Chengdu E-Microwave	OHF-3-18-S	0E01901038	03/27/2022
3	High Pass Filter	Chengdu E-Microwave	OHF-6.5-18- S	0E01901039	03/27/2022
4	Spectrum Analyzer	HP	8593E	3831U02087	04/07/2022
5	Ultra-Broadband logarithmic period Antenna	Schwarzbeck	VULB 9163	01230	03/29/2023
6	Loop Antenna	Beijin ZHINAN	ZN30900C	18050	03/25/2022
7	Spectrum Analyzer	R&S	FSV40-N	101798	04/07/2022
8	Horn Antenna	Schwarzbeck	BBHA 9120 D	2023	03/29/2023
9	Pre-Amplifier	Schwarzbeck	BBV 9745	9745#129	04/07/2022
10	Pre-Amplifier	EMCI	EMC051835 SE	980662	04/07/2022
11	Pre-Amplifier	Schwarzbeck	BBV-9721	57	04/07/2022
12	Horn Antenna	Schwarzbeck	BBHA 9170	00939	03/29/2022

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	LISN	R&S	ENV432	1326.6105.02	03/27/2022
2	EMI Test Receiver	R&S	ESR	102524	04/07/2022
3	Manual RF Switch	JS TOYO	/	MSW-01/002	04/07/2022

Note:

1)The Cal. Interval was one year.

2)The cable loss has calculated in test result which connection between each test instruments.

TRF No. FCC Part 15.247_R1

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2.4. TEST SOFTWARE

Software name	Model	Version
Radiated emission Measurement Software	EZ-EMC	FA-03A.2.RE
Bluetooth and WIFI Test System	JS1120-3	2.5.77.0418

TRF No. FCC Part 15.247_R1

Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



3. TEST ITEM AND RESULTS

3.1. ANTENNA REQUIREMENT

Requirement

FCC CFR Title 47 Part 15 Subpart C 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

<u>Test Result</u>

The directional gain of the antenna less than 6dBi, please refer to the EUT internal photographs antenna photo.

Note: The antenna is permanently fixed to the EUT

TRF No. FCC Part 15.247_R1

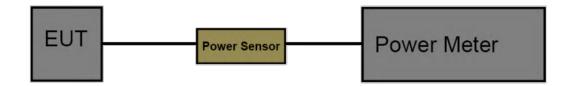


3.2. PEAK OUTPUT POWER

<u>Limit</u>

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	1 Watt or 30 dBm	2400~2483.5

Test Configuration



Test Procedure

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator.
- 2. The measurement is according to ANSI C63.10 (2013) for compliance to FCC 47CFR 15.247 requirements.
- 3. Spectrum Setting:

Set analyser center frequency to DTS channel center frequency. Set the RBW to: 1MHz Set the VBW to: 3MHz Detector: peak Sweep time: auto Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

4. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

Test Mode

Please refer to the clause 2.2

TRF No. FCC Part 15.247_R1

Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



<u>Test Result</u>

Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)
	2412	8.92	
802.11b	2437	8.60	
	2462	9.14	
	2412	9.43	
802.11g	2437	9.08	30
	2462	9.50	
	2412	9.34	
802.11n (HT20)	2437	8.98	
	2462	9.36	
	Result :	PASS	

TRF No. FCC Part 15.247_R1



3.3. POWER SPECTRAL DENSITY

<u>Limit</u>

	FCC Part 15 Subpart C(15.247	')
Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

Test Configuration

EUT	Spectrum Analyzer
	epool and and and a

Test Procedure

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator.
- The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to ANSI C63.10 (2013) for compliance to FCC 47CFR 15.247 requirements.
- 3. Spectrum Setting:

Set analyser center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz

Set the VBW to: 10 kHz

Detector: peak

Sweep time: auto

Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

Test Mode

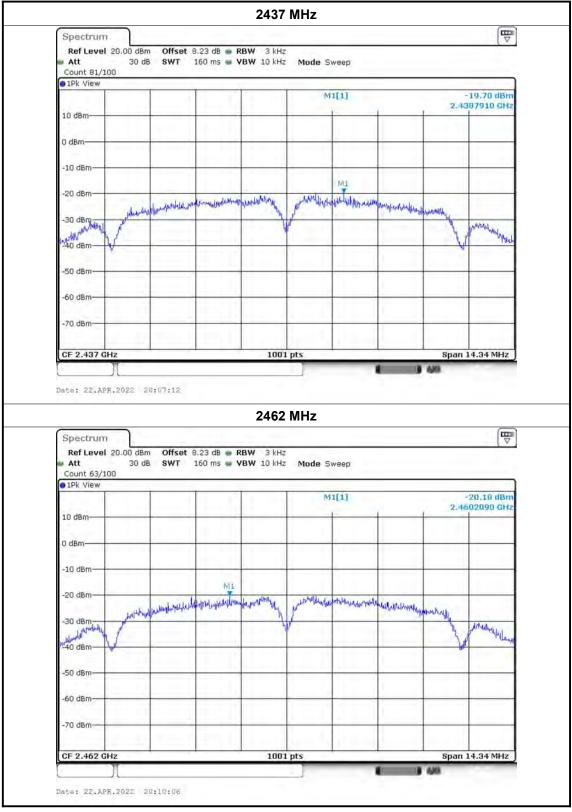
Please refer to the clause 2.2

TRF No. FCC Part 15.247_R1

Add:West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

Test Mode:		802.11b Mode	
hannel Frequency (MHz)	Power Density (dBm/10kHz)	Power Density (dBm/3kHz)	Limit (dBm)
2412	/	-20.09	
2437	/	-19.7	8dBm/3kHz
2462	/	-20.18	_
	2412 N	IHz	I
Spectrum			
Att 30 dB SV Count 81/100	fset 8,23 dB 🗰 RBW 3 kHz /T 160 ms 🖬 VBW 10 kHz	Mode Sweep	
e 1Pk View	1 1 1	M1[1]	-20.09 dBm
10 dBm			2.4127160 GHz
0 dBm			
-10 dBm			
-20 dBm		Mi	
alexandra and a second	uniperturbation of the	purper and a second and the second particular and purper and purper and purper and purper and purper and purper	work
-30 dBm	V		and manaphanen
-50 dBm			
-60 dBm			
-70 dBm			
CF 2.412 GHz	1001 pt	5	Span 14.34 MHz
11			10



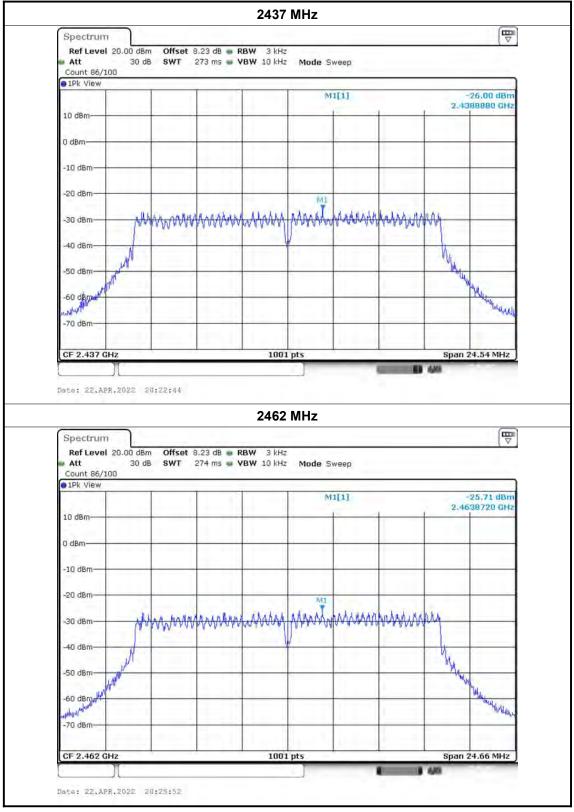


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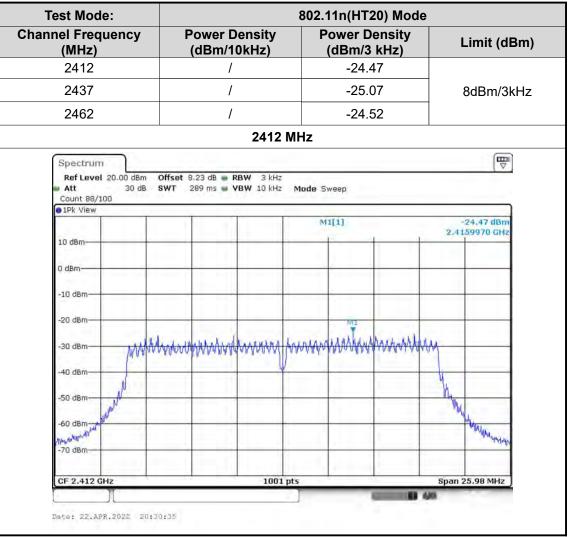


Test Mode:		802.11g Mode	
Channel Frequency (MHz)	Power Density (dBm/10 kHz)	Power Density (dBm/3 kHz)	Limit(dBm
2412	/	-25.52	
2437	1	-26.00	8dBm/3kHz
2462	/	-25.71	
	2412 MHz		1
Spectrum			
Ref Level 20.00 dBm Off Att 30 dB SW Count 85/100	set 8.23 dB 8 RBW 3 kHz T 272 ms VBW 10 kHz Mode	Sweep	
1Pk View			
		M1[1]	-25.52 dBm 138830 GHz
10 dBm			Looddo dife
0 dBm-			
-10 dBm			1.
-20 dBm	Ma		
-30 dBm AlthAnne	ALARAMANA ALAMAN ALAMANA		
-30 dBm AMAAA	CONTRACTOR CONTRACTOR CONTRACTOR	VARAA A A A A A A A A A A A A A A A A A	
-40 dBm			
		M.	
-50 dBm-			
so don M			Phys.
-60 dBm			with a fundament
-70 dBm			- 944
CF 2.412 GHz	1001 pts	Span	24.48 MHz

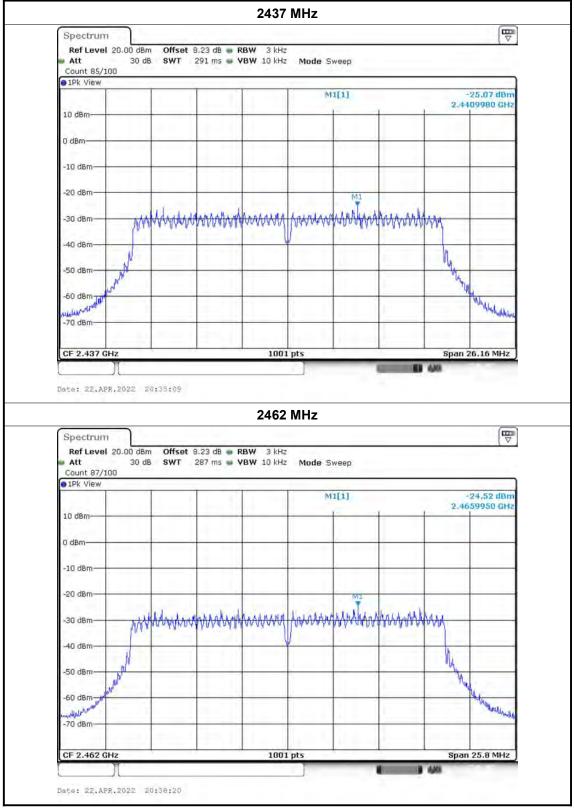












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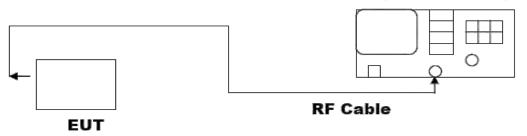
3.4. BANDWIDTH

<u>Limit</u>

Test Item	Limit	Frequency Range(MHz)
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5

Test Configuration

Spectrum Analyzer



Test Procedure

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator: 6db Bandwidth
 - (1) Set RBW = 100 kHz.
 - (2) Set the video bandwidth (VBW) \ge 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

<u>Test Mode</u>

Please refer to the clause 2.2.

TRF No. FCC Part 15.247_R1

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9	1b Mode	02.11b	80				:	Mode	Test	-
Limit (MHz	łz) L	(MHz)	ndwidth	B Ba	6dE	<u>z)</u>	cy (MHz	quenc	l fre	anne
			9.56					412	2	
>=0.5			9.56					437	2	
			9.56					462	2	
			Z	2 MI	2412					
								Γ	um	Spectr
-11.38 dBm 2.4074800 GHz -6.40 dBm 2.4125200 GHz	2.4		M1[1] M2[1]	Hz	7 8W 300 ki	1 ms 🖷 '	SWT	30 dB		• Att Count : • 1Pk Vie 10 dBm-
1.4120200 012		1	AA L DE	M2	Inter	M		1.1		0 dBm-
			hall be	V	1 Million	M	d8m	-12,400	01	-10 dBm
		Chy .	V			N				-20 dBm
		K		-		1				-30 dBm
		1	-	+			f			-40 d8m
and the manufactures and	hard a second and the second	- An	-	+			month	withput	num	-50 d8m
			1	1					-	-60 d8m
				1					-	-70 dBm
Span 40.0 MHz	Spar	1	-)1 pts	100		()	-	12 GH	CF 2.41
a Garanti	Function Resul	1	unction	- 1	Y-value	1	X-value	Treal	Def.	Marker Type
JII Kesult	Function Resul		unction	IBm	-11.38 d	48 GHz		1	Rei	M1
					-6.40 d	52 GHz		1		M2
				dB	-0.99	6 MHz	9.9	1	M1	D3
								-	-	1



				2437	MHz				
Spectrum									E.
Ref Level				RBW 100 kHz					
Att Count 100/	30	dB SWT	1 ms -	VBW 300 kHz	z Mode S	weep			
1Pk View									
C					Ma	(1)			-11.93 dB
10 dBm		+		-	M2	2[1]		2.4	-6.69 dB
0 dBm							-	2.4	380000 GH
2.24			1	M1	M2				
-10 dBm-1	01 -12.69	90 d8m	1	The work	many	July.	-		-
-20 dBm			AM/	Y		1/4	-	-	
-30 d8m			J. W.			W al	V.	_	
		1	2				N		
-40 d8m						10.000	1		
-50 dBm	Munimu	wetnessed				<u>.</u>	brusy	and the particular	W. Malanus
-60 d8m-	-							1.1.40.00	11111
		1.1.1							
-70 d8m									
CF 2.437 G	Hz	-		1001	pts	-	1	Snar	1 40.0 MH
Marker						- 7		- pui	
Type Ref	Trc 1	X-value	48 GHz	Y-value -11.93 dBr	Funct	ion	Fu	nction Resul	t
M1 M2	1		38 GHz	-11,93 dBr -6.69 dBr					
D3 M1	1 1	9.5	56 MHz	-0.72 d	B				
CC 17 100000	a scheduler in	and contraction							
ologi akaza	1,2022	20:06:15		2462	MU-			é es	
	Ŋ,2022	20:06:15		2462	MHz			é e	
	_	20:06:15		2462	MHz				Ę
Spectrum Ref Level			3.23 dB	2462 RBW 100 kHz			_	_	
Spectrum Ref Level	20.00 dE 30	Bm Offset 8			z	weep	_		Ē
Spectrum Ref Level Att Count 100/	20.00 dE 30	Bm Offset 8		RBW 100 kHz	2	weep			(<mark>¤</mark>
Spectrum Ref Level	20.00 dE 30	Bm Offset 8		RBW 100 kHz	z z Mode S	weep			
Spectrum Ref Level Att Count 100/	20.00 dE 30	Bm Offset 8		RBW 100 kHz	z z Mode S M3	(1)			-11.05 dB 574800 GF
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm	20.00 dE 30	Bm Offset 8		RBW 100 kHz	z z Mode S M3			2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View	20.00 dE 30	Bm Offset 8	1 ms	RBW 100 kHz VBW 300 kHz	z Mode S M3 M2	(1)		2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm	20.00 dE 30	Bm Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1)		2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm	20.00 dE 30 1 100	Bm Offset 8 dB SWT	1 ms	RBW 100 kHz	Z Mode S M1 M2	(1) 2(1)		2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm (-20 dBm	20.00 dE 30 1 100	Bm Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)	4	2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm	20.00 dE 30 1 100	Bm Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)		2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm (-20 dBm	20.00 dE 30 1 100	Bm Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)		2,4	-11.05 dB 574800 GF -6.32 dB
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dE 30 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)		2.4	-11.05 dBi 574800 Gł -6.32 dBi 535200 Gł
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Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm	20.00 dE 30 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)	y y y	2.4	-11.05 dB 574800 GF -6.32 dB 535200 GF
Spectrum Ref Level Att Count 100// 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -50 dBm -50 dBm	20.00 dE 30 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)	A A A A A A A A A A A A A A A A A A A	2.4	-11.05 dB 574800 GF -6.32 dB 535200 GF
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -50 dBm -50 dBm -60 dBm	20.00 dE 30 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	Z Mode S M1 M2	(1) 2(1)	4 A A A A A A A A A A A A A A A A A A A	2.4	-11.05 dB 574800 GF -6.32 dB 535200 GF
Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -60 dBm -60 dBm	20.00 db 30 1 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	M2	(1) 2(1)		2.41 2.41	-11.05 dB 574800 GF -6.32 dB 535200 GF
Spectrum Ref Level Att Count 100// 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -30 dBm -70 dBm -70 dBm CF 2.462 G	20.00 de 30 1 100	am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz	m2 M2 M2 M2 M2 M2			2.41 2.41	-11.05 dB 574800 GF -6.32 dB 535200 GF
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Spectrum Ref Level Att Count 100/ 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -50 dBm -60 dBm -70 dBm -80 dBm -80 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -10 dBm -20 dBm -10	20.00 dE 30 1 100 01 -12.32 44-4-4-4-4 Hz Hz	Am Offset 8 dB SWT	1 ms	RBW 100 kHz VBW 300 kHz M1 M1 M1 M1 M1 M1 M1 M1 M1 M1 M1 M1 M1	z Mode S M3 M2 M2 M2 M2 Furct			2.41 2.41	-11.05 dB 574800 GF -6.32 dB 535200 GF

Add:West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



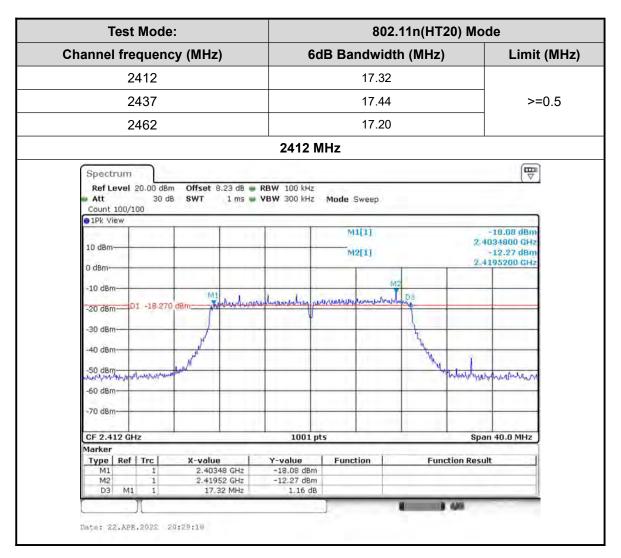
Test Mo	de:		802	2.11g M	ode	
hannel freque	ncy (MHz)	6dB Bar	ndwidth (N	IHz)	Lim	it (MHz)
2412			16.32			
2437			16.36		>	>=0.5
2462			16.44			
		2412 M	Hz			
Spectrum						
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10 dBm			M2[1]		2.40	038800 GHz -11.96 dBm 170000 GHz
-10 dBm	ML	аланисталина Лич	Ma	3 الم		
-20 dBm	dBm					
-40 dBm	June 1			Jay		1
-50 dBm	10 Mb wards			1	Normannaline	ipson and the
-60 dBm						1
CF 2.412 GHz		1001 pt	5		Spar	40.0 MHz
Marker						
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				10	4,48	



				2437					_
Spectrun	n								
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Ount 100	/100							_	
			1.14		Ma	1[1]			-17.90 dBr
10 dBm		++		+	MS	2[1]			288400 GH -12.61 dBr
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-10 d8m					M2				
		ML	-	Annonements ,	mugallions	menubur	3		
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Type Re		X-value 2.4288	1.04-	Y-value	Funct	tion	Fun	ction Result	t
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late: 22.A	_	0:21:29		2462				646	ſ
Spectrun	n		23 dB	2462				4,468	(T
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Spectrun Ref Leve	n I 20.00 dBr 30 d	n Offset 8.		2462 RBW 100 kHz	MHz	Sweep		446	(The second seco
Spectrun Ref Leve Att Count 100	n I 20.00 dBr 30 d	n Offset 8.		2462 RBW 100 kHz	Mode S	Sweep			(⊽ -17.96 dBr
Spectrun Ref Leve Att Count 100	n I 20.00 dBr 30 d	n Offset 8.		2462 RBW 100 kHz	Mode S		-	2.45	-17.96 dBr 538400 GH -13.72 dBr
Spectrum Ref Leve Att Count 100 1Pk View	n I 20.00 dBr 30 d	n Offset 8.		2462 RBW 100 kHz	Mode S	ı(1)		2.45	-17.96 dBr 538400 GH
Spectrun Ref Leve Att Count 100 1Pk View 10 dBm-	n I 20.00 dBr 30 d	n Offset 8. 8 SWT		2462 RBW 100 kHz	Mode S	ı(1)		2.45	-17.96 dBr 538400 GH -13.72 dBr
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm	n 20.00 dBr 30 d /100	n Offset 8. 8 SWT	1 ms 🖷	2462 RBW 100 kHz	MHZ Mode S	l[1] 2[1]		2.43	-17.96 dBr 538400 GH -13.72 dBr
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm- 0 dBm- -10 dBm- -20 dBm-	n I 20.00 dBr 30 d	n Offset 8. 8 SWT	1 ms 🖷	2462 RBW 100 kHz VBW 300 kHz	MHZ Mode S	l[1] 2[1]		2.43	-17.96 dBr 538400 GH -13.72 dBr
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm	n 20.00 dBr 30 d /100	n Offset 8. 8 SWT	1 ms 🖷	2462 RBW 100 kHz VBW 300 kHz	MHZ Mode S	l[1] 2[1]		2.43	-17.96 dBr 538400 GH -13.72 dBr
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Spectrum Ref Leve Att Count 100 • 1Pk View 10 dBm -10 dBm -10 dBm -30 dBm -30 dBm -30 dBm -50 dBm	-01 -19.720	n Offset 8. B SWT	1 ms 🖷	2462 RBW 100 kHz VBW 300 kHz	MHZ Mode S	l[1] 2[1]	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.43	-17.96 dBr 538400 GH -13.72 dBr 570400 GH
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Spectrum Ref Leve Att Count 100 • 1Pk View 10 dBm	-01 -19.720	n Offset 8. B SWT	1 ms 🖷	2462 RBW 100 kHz VBW 300 kHz	MHZ Mode S	l[1] 2[1]	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.43	-17.96 dBr 538400 GH -13.72 dBr 570400 GH
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Spectrum Ref Leve Att Count 100 1Pk View 10 dBm		n Offset 8. B SWT	1 ms -	2462 RBW 100 kHz VBW 300 kHz	Mode S MJ MS PUXN/MAAN	1[1] 2[1] 		2.45 2.45	-17.96 dBr 538400 GH -13.72 dBr 570400 GH
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm -50 dBm -70	1 20.00 dBr 30 d /100	n Offset 8. B SWT	1 ms -	2462 RBW 100 kHz VBW 300 kHz Autor do Hautor Autor do Hautor 1001 p 1001 p -17.96 dBm -17.96 dBm -17.96 dBm -13.72 dBm	Mode S Mode S M3 M2 POXMMANK S S S S S S S S S S S S S S S S S S S	1[1] 2[1] 		2.43 2.45 Winthoma Spar	-17.96 dBr 538400 GH -13.72 dBr 570400 GH
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm -0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -40 dBm -40 dBm -50 dBm -70	-01 -19.720	n Offset 8. B SWT	1 ms -	2462 RBW 100 kHz VBW 300 kHz ////////////////////////////////////	Mode S Mode S M3 M2 POXMMANK S S S S S S S S S S S S S S S S S S S	1[1] 2[1] 	Fun	2.43 2.45 Winthoma Spar	-17.96 dBr 538400 GH -13.72 dBr 570400 GH

Add:West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China







			24	37 MHz				
Spectrur	n		_					
Ref Leve Att Count 100	al 20.00 dB 30 d		dB - RBW 10 ms - VBW 30		Sweep			
●1Pk View	T-	1 1					_	10.10.45
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0 dBm					1	1	2,44	20000 GH
-10 dBm		M1			M2	1		
-20 dBm	D1 -18.55		enlawroppenness	rely pomoutin	at Max men	US.		
-30 dBm			_	-		1		
-40 dBm	-	1			1.	y y		
-50 dBm-	and the second and	and		_		Ky	www.amu	in the state
-60 dBm	Marshan and			_	11.10		A Mall Sugar	ard manufactor
-70 d8m		1			11.4			1.00
-70 Gom			1010	1.1.1	1.0	1		1.00
CF 2.437 Marker	GHz			1001 pts			Span	40,0 MHz
Type Re		X-value	Y-val		ction	Func	tion Result	t .
M1 M2	1	2.42836 (2.442 (GHz -12.5	19 dBm 55 dBm				
D3 N	41 1	17.44 N	MHZ 0	.34 dB		_		
late: 22.A	PR.2022	20:33:52	2/	62 MH7		_	4,45	
	_	20:33:52	24	62 MHz			40	Ē
Spectrur Ref Leve Att Count 100	n al 20.00 dB 30 d	m Offset 8,23	24 dB RBW 10 ms VBW 30	10 kHz	Sweep		448	(T
Spectrur Ref Leve	n al 20.00 dB 30 d	m Offset 8,23	dB 🖷 RBW 10	10 kHz 10 kHz Mode				(^Щ √
Spectrur Ref Leve Att Count 100	n al 20.00 dB 30 d	m Offset 8,23	dB 🖷 RBW 10	10 kHz 10 kHz Mode	Sweep 41[1] 42[1]		2.45	17.90 dBn 36000 GH 12.39 dBn
Spectrur Ref Leve Att Count 100 1Pk View	n al 20.00 dB 30 d	m Offset 8,23	dB 🖷 RBW 10	10 kHz 10 kHz Mode	11[1]		2.45	-17.90 dBn 536000 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm-	m 1 20.00 dB 30 d 0/100	m Offset 8.23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]		2.45	17.90 dBn 36000 GH 12.39 dBn
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm- 0 dBm-	n al 20.00 dB 30 d	m Offset 8.23 B SWT 1	dB 🖷 RBW 10	10 kHz 10 kHz Mode	41[1] 42[1]		2.45	17.90 dBn 36000 GH 12.39 dBn
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm- 0 dBm- -10 dBm-	m 1 20.00 dB 30 d 0/100	m Offset 8.23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]		2.45	17.90 dBn 36000 GH 12.39 dBn
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm- -10 dBm- -20 dBm-	m 1 20.00 dB 30 d 0/100	m Offset 8,23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]		2.45	17.90 dBn 36000 GH 12.39 dBn
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	m 1 20.00 dB 30 c 1/100	m Offset 8.23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]	A Contraction of the second se	2.45	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm-	m 1 20.00 dB 30 d 0/100	m Offset 8.23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]	A Contraction of the second se	2.45	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrum Ref Leve Att Count 100 1Pk View 10 dBm -10 dBm -10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -40 dBm	m 1 20.00 dB 30 c 1/100	m Offset 8.23 B SWT 1	8 dB • RBW 10 ms • VBW 30	10 kHz 10 kHz Mode	41[1] 42[1]	A Contraction of the second se	2.45	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm- -70 dBm-	n 1 20.00 dB 30 d 1/100	m Offset 8.23 B SWT 1	de Rew 10 ms Vew 30	10 kHz 10 kHz Mode	41[1] 42[1]	A Contraction of the second se	2.45 2.46	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm- -10 dBm- -20 dBm- -30 dBm- -40 dBm- -50 dBm- -60 dBm-	n 1 20.00 dB 30 d 1/100	m Offset 8.23 B SWT 1	de Rew 10 ms Vew 30	10 kHz 10 kHz Mode	41[1] 42[1]	A Contraction of the second se	2.45 2.46	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm CF 2.462 Marker Type Ref M2	m 30 c 30 c 1/100 DI -18.39 DI -18.39 GHz GHz af Trc 1 1	m Offset 8.23 B SWT 1	0 dB RBW 10 ms VBW 30	10 kHz 10 kHz Mode M2 M2 M2 1001 pts	41[1] 42[1]	A Carlos and a car	2.45 2.46	17.90 dBn 36000 GH 12.39 dBn 45200 GH
Spectrur Ref Leve Att Count 100 1Pk View 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -70 dBm CF 2.462 Marker Type Ref M2	m 1 20.00 dB 30 c 1/100 101 -18.39 101 -18.39 GHz GHz 2f Trc 1	m Offset 8.23 B SWT 1	0 dB RBW 10 ms VBW 30	10 kHz 10 kHz Mode 10 kHz Mode 100 kHz Mode 100 kHz 100 kHz	11[1] 12[1]	A Carlos and a car	2.45 2.46	17.90 dBn 36000 GH 12.39 dBn 45200 GH



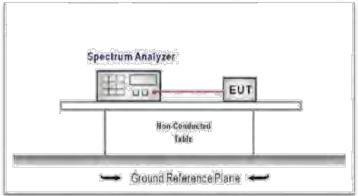
3.5. BAND EDGE AND SPURIOUS EMISSION (CONDUCTED)

<u>Limit</u>

FCC CFR Title 47 Part 15 Subpart C Section15.247 (d):

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 Configuration



Test Procedure

- 1. Connect EUT RF Output port to the Spectrum Analyzer through an RF attenuator.
- 2. Spectrum Setting:

RBW=100KHz VBW=300KHz. Detector function: Peak. Trace: Max hold. Sweep = Auto couple.

Allow the trace to stabilize.

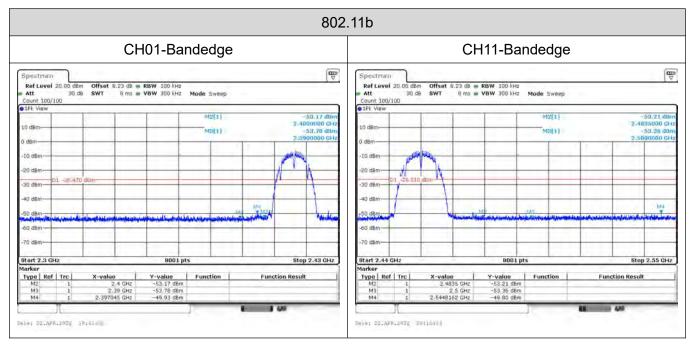
Test Mode

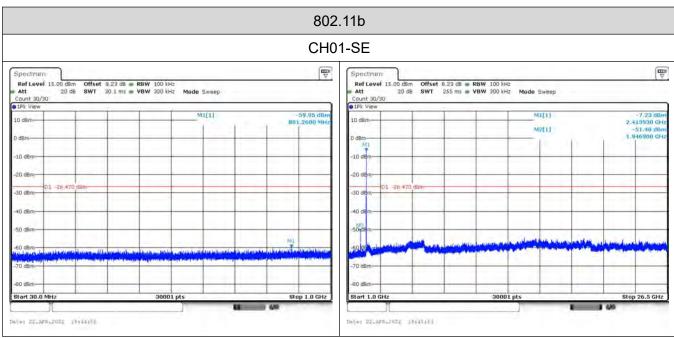
Please refer to the clause 2.2.

TRF No. FCC Part 15.247_R1

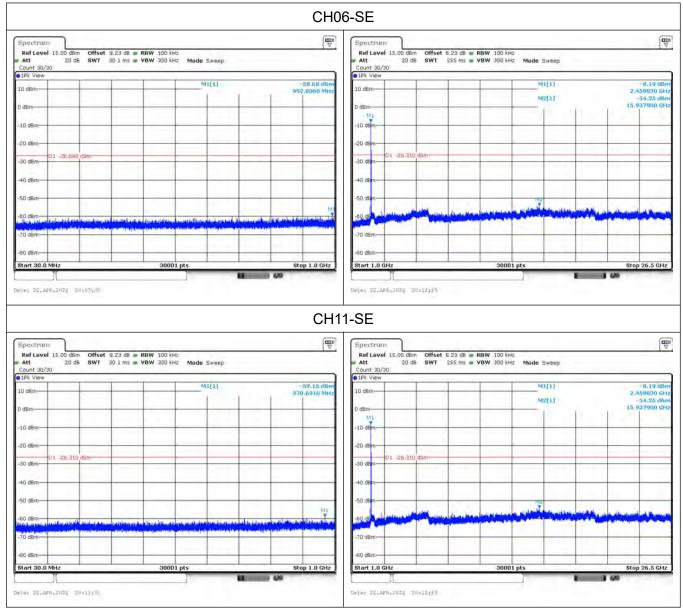


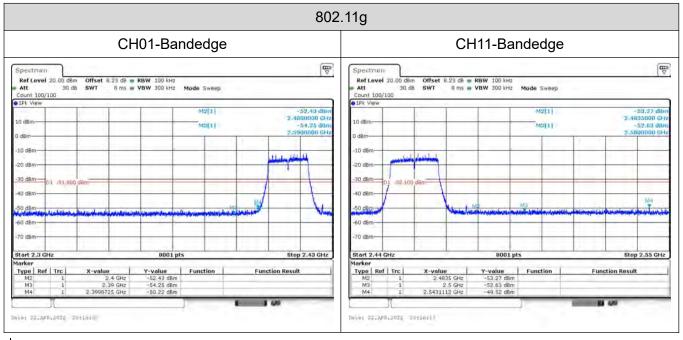






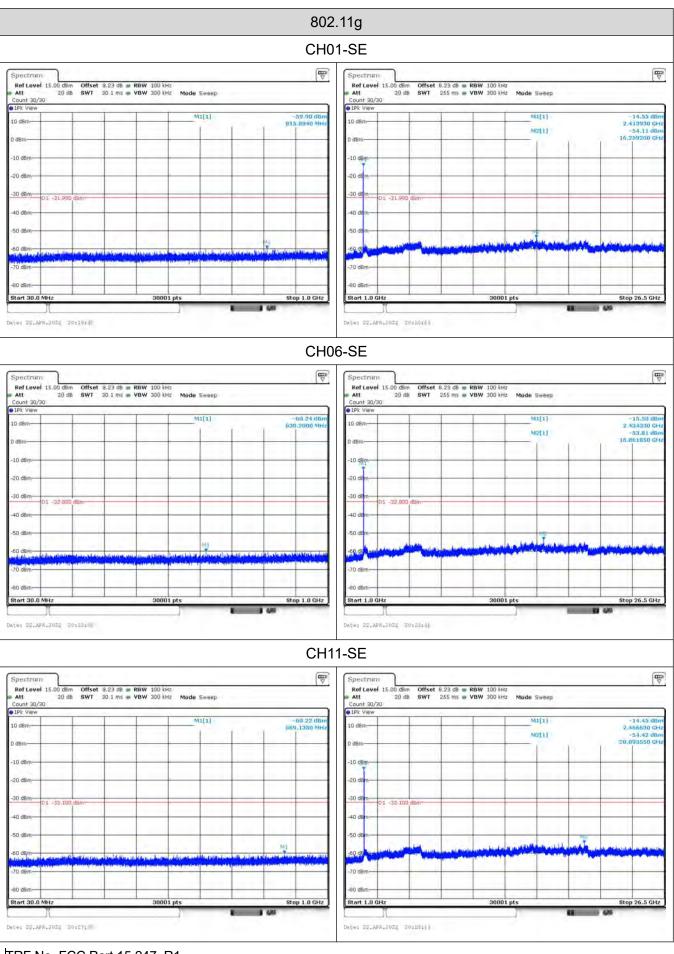




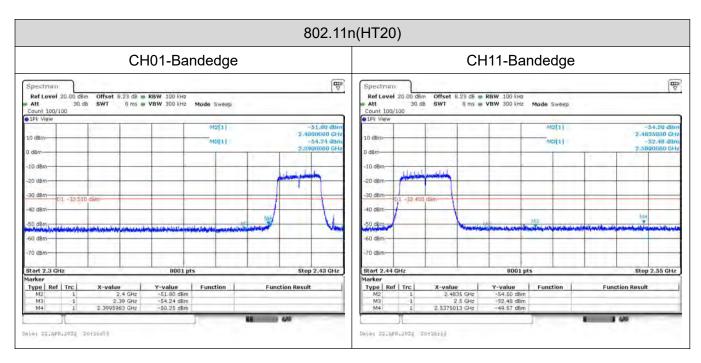


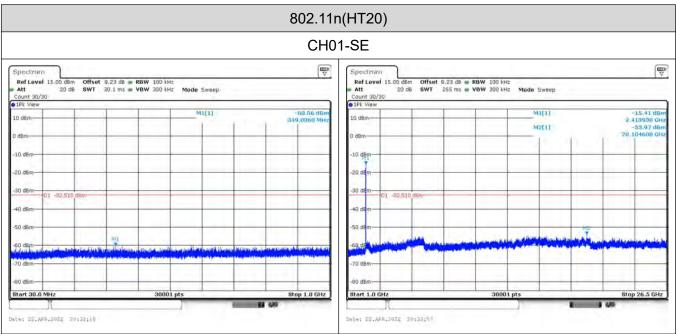
Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China



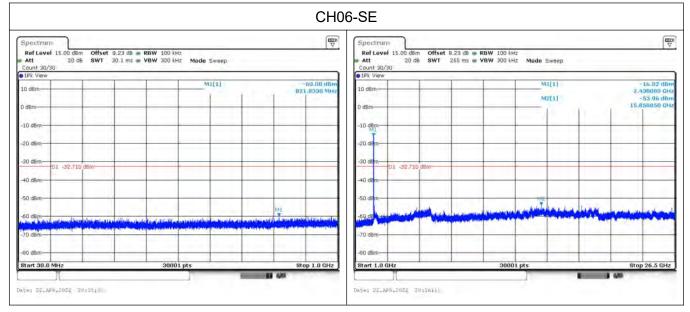


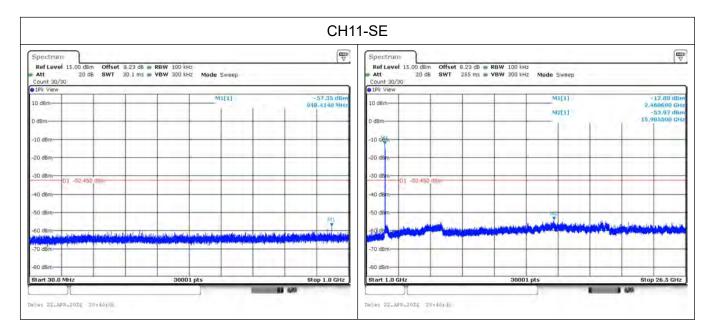
Add:West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China











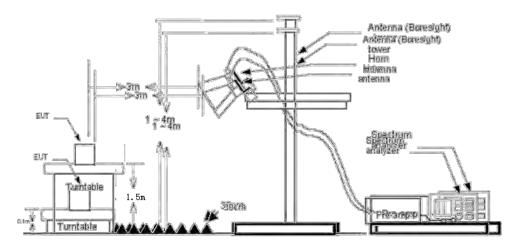


3.6. BAND EDGE EMISSIONS(RADIATED)

<u>Limit</u>

Restricted Frequency Band (MHz)	(dBuV/m)(at 3m)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54
Note: All restriction bands have been tested, only the worst case is reported.		

Test Configuration



Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- The receiver set as follow: RBW=1MHz, VBW=3MHz PEAK detector for Peak value. RBW=1MHz, VBW=10Hz with PEAK detector for Average Value.

Test Mode

Please refer to the clause 2.2.

Test Results

Note:

1.Measurement = Reading level + Correct Factor

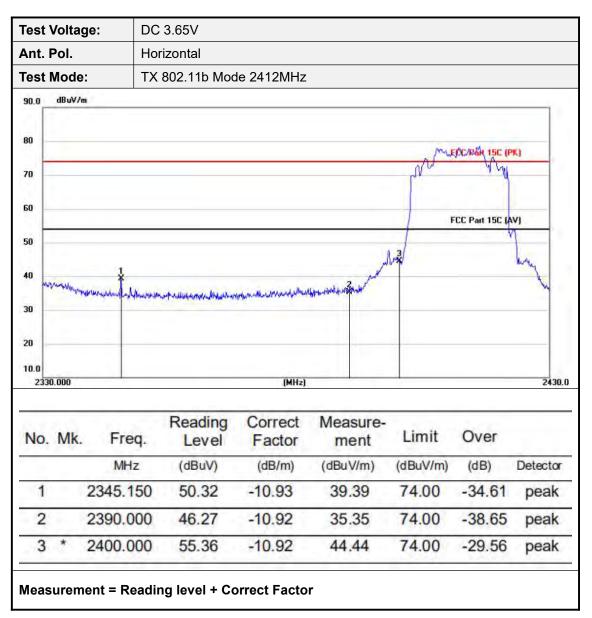
Correct Factor=Antenna Factor + Cable Loss - Preamplifier Factor

2.Pre-scan 802.11b, 802.11g, 802.11n(HT20) and 802.11n (HT40) mode, and found the 802.11b mode which it is worse case, so only show the test data for worse case.

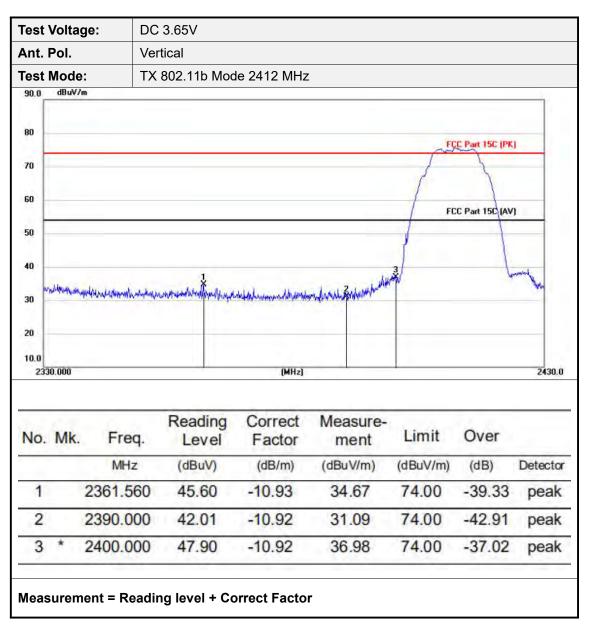
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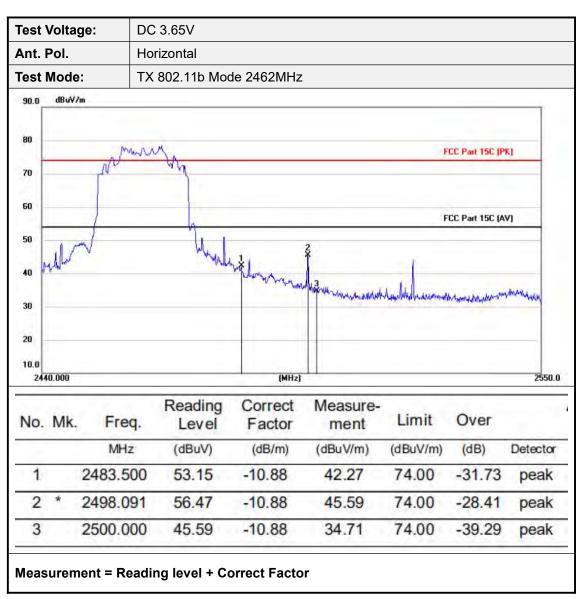






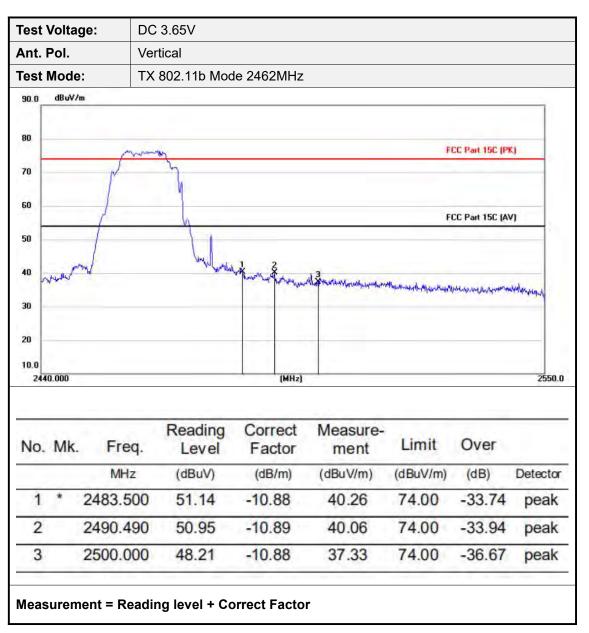






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3.7. SPURIOUS EMISSION (RADIATED)

<u>Limit</u>

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

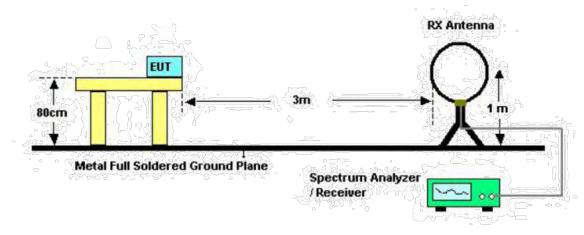
Radiated Emission Limit (Above 1000MHz)

Frequency	Distance Meters(at 3m)		
(MHz)	Peak	Average	
Above 1000	74	54	

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

Test Configuration



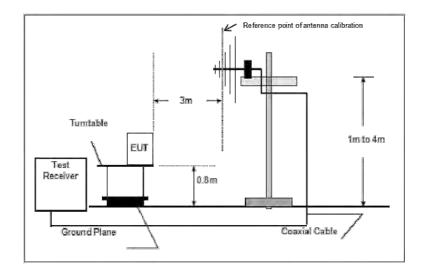
Below 30MHz Test Setup

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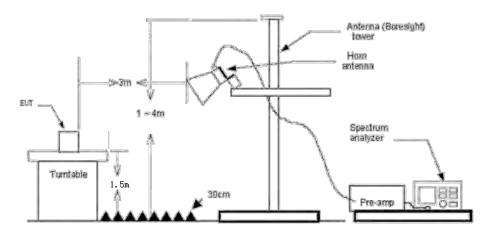
Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China

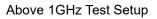
Page 40 of 53





Below 1000MHz Test Setup





Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013
- 2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
- 4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- 6. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;

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(2) Below 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(3) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=1MHz Peak detector for Peak value.

RBW=1MHz, VBW=10Hz Peak detector for Peak value.

<u>Test Mode</u>

Please refer to the clause 2.2.

<u>Test Result</u>

9 KHz~30 MHz and 18GHz~25GHz

From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

Note:

1) Measurement = Reading level + Correct Factor

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

- 2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 5) Pre-scan 802.11b/g/n(HT20,HT40) modulation, and found the 802.11b modulation which it is worse case for above 1GHz, 2412MHz channel which it is worse case for below 1GHz, so only show the test data for worse case.

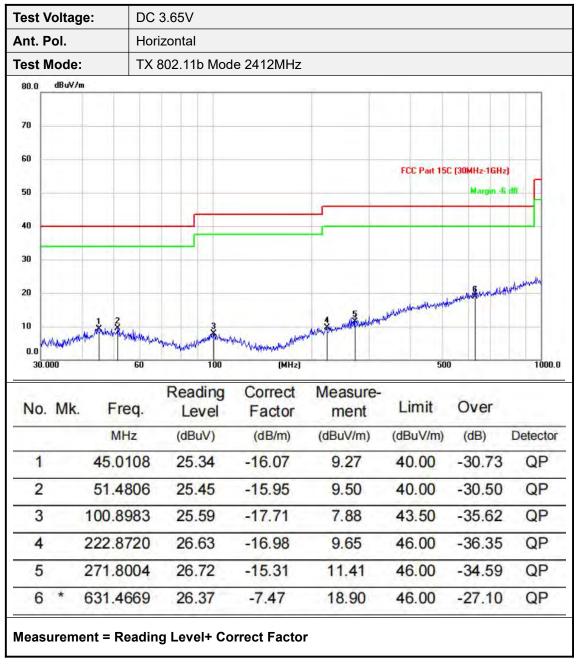
BELOW 30MHz

No emission found between lowest internal used/generated frequencies to 30MHz.

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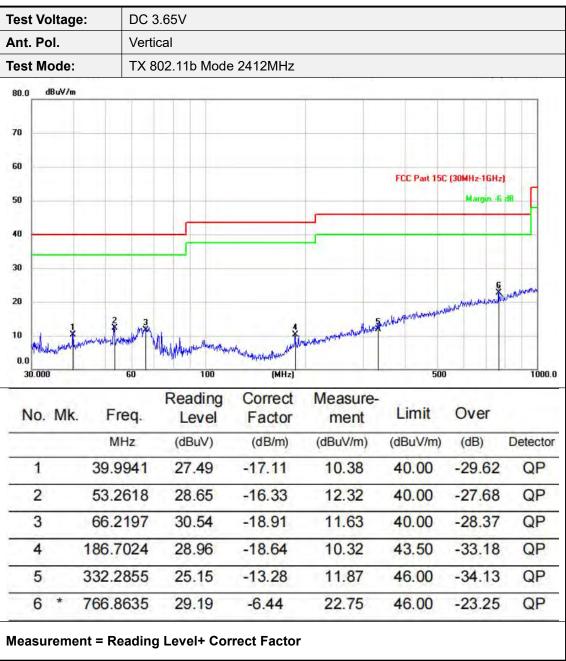
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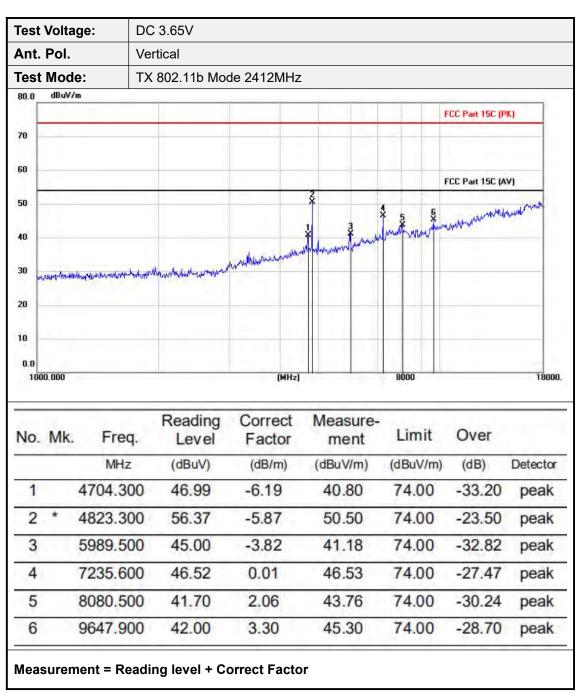
Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China Tel : +(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail : info@gdksign.cn Web: www.gdksign.com



Test Voltage: Ant. Pol.		age:	DC 3.65V							
		-	Horizontal							
Test Mode:			TX 802.11b Mode 2412MHz							
80.0	dBuV	/m								
80.0 0004710						F	CC Part 15C (P)	0		
70	-									
60						F	CC Part 15C (A)	n		
50					* 4 *			6		
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30	whent	to the formatter of the garantees	and a second and the second second	Novinder Stanged and						
20										
10										
0.0 100	0.000			(MHz)		8000		18000.		
No.	Mł	c. Freq	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector		
1		3359.60	47.86	-9.93	37.93	74.00	-36.07	peak		
2	8	4031.10	0 47.01	-8.32	38.69	74.00	-35.31	peak		
3	*	4823.30	0 58.03	-5.87	52.16	74.00	-21.84	peak		
4	5	7235.60	0 50.68	0.01	50.69	74.00	-23.31	peak		
5	P	9647.90	42.53	3.30	45.83	74.00	-28.17	peak		
6	1	16385.00	0 36.81	13.53	50.34	74.00	-23.66	peak		

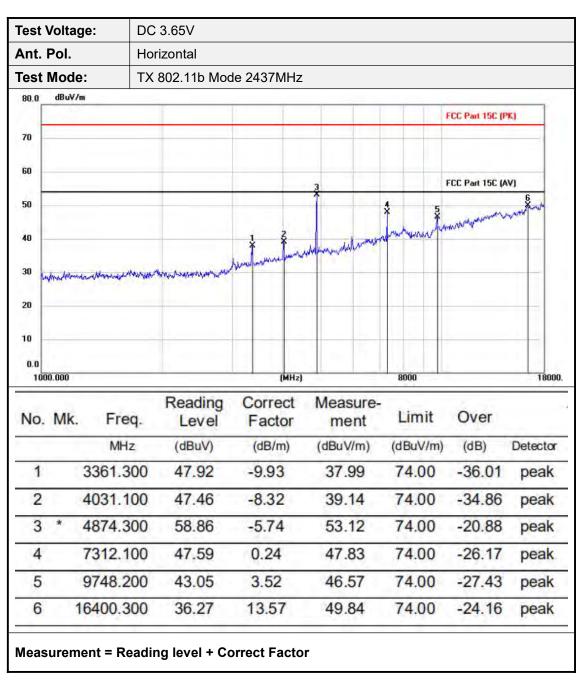
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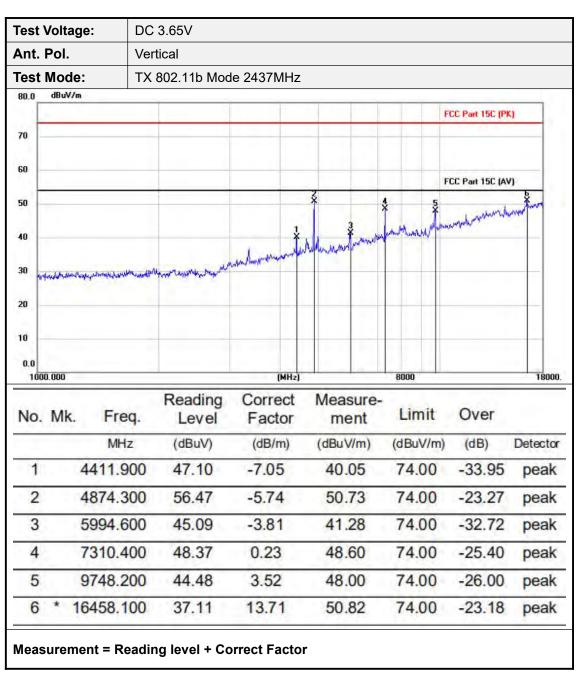
Add : West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China





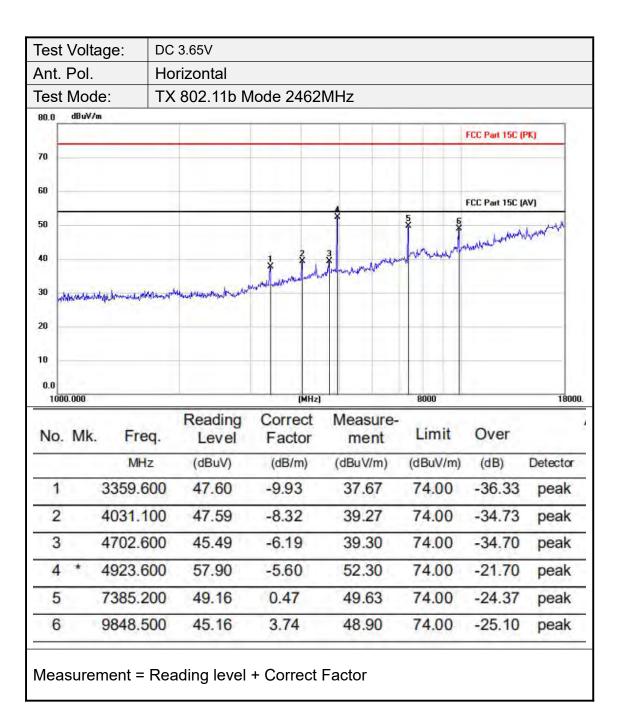
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U		DC 3.65V							
		Vertical TX 802.11b Mode 2462MHz							
							FCC Part 15C (P	K]	
70								_	
60					_				
-					3	5	FCC Part 15C (A	-	
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20									
20 10									
10 0.0									
10 0.0	00.000			(MHz)		8000		18000	
10 0.0 100			Reading				Over	18000	
10 0.0 100	00.000		Reading	(MHz) Correct	Measure-		10.000	T8000	
10 0.0 100	00.000	Freq.	Reading Level (dBuV)	(MH2) Correct Factor	Measure- ment	Limit	10.000		
10 0.0 100 NO.	00.000	Freq. MHz	Reading Level (dBuV) 46.20	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	(dB)	Detector	
10 0.0 100 No.	00.000	Freq. MHz 3373.200	Reading Level (dBuV) 46.20 45.53	(MHz) Correct Factor (dB/m) -9.91	Measure- ment (dBuV/m) 36.29	Limit (dBuV/m) 74.00	(dB) -37.71	Detector peak	
10 0.0 100 No.	00.000 Mk.	Freq. MHz 3373.200 4697.500	Reading Level (dBuV) 0 46.20 0 45.53 0 59.38	(MHz) Correct Factor (dB/m) -9.91 -6.22	Measure- ment (dBuV/m) 36.29 39.31	Limit (dBuV/m) 74.00 74.00	(dB) -37.71 -34.69	Detector peak peak	
¹⁰ 0.0 100 No.	00.000 Mk.	Freq. MHz 3373.200 4697.500 4923.600	Reading Level (dBuV) 0 46.20 0 45.53 0 59.38 0 44.71	(MHz) Correct Factor (dB/m) -9.91 -6.22 -5.60	Measure- ment (dBuV/m) 36.29 39.31 53.78	Limit (dBuV/m) 74.00 74.00 74.00	(dB) -37.71 -34.69 -20.22	Detector peak peak peak	

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3.8. CONDUCTED EMISSION

<u>Limit</u>

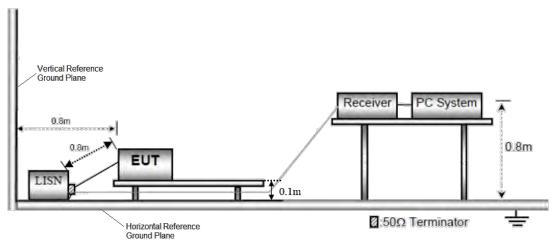
Conducted Emission Test Limit

Eroguanov	Maximum RF Line Voltage (dBμV)			
Frequency	Quasi-peak Level	Average Level		
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Configuration



Test Procedure

- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 0.1m above the conducting ground plane. The vertical conducting plane was located 80 cm to the rear of the EUT. All other surfaces of EUT were at least 0.8m from any other grounded conducting surface.
- The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 7. During the above scans, the emissions were maximized by cable manipulation.

Test Mode:

Please refer to the clause 2.2.

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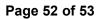
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Note: The device is powered by an internal battery, so this item is not available.

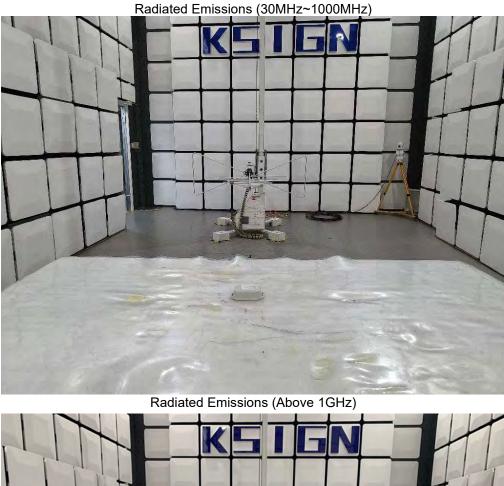
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5.PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Please refer to the report Report No.: KS2204S1365E01

--THE END--

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