



FCC TEST REPORT (PART 90)

Applicant:	Jiangyin Xinxinzhihuo Technology Co., Ltd.
Address:	Room 302, Building 1, No.2, Binjiang West Road, Jiangyin City, China

Manufacturer or Supplier	Jiangyin Xinxinzhihuo Technolo	gy Co., Ltd.		
Address	Room 302, Building 1, No.2, Bir	Room 302, Building 1, No.2, Binjiang West Road, Jiangyin City, China		
Product	LTE Module			
Brand Name	芯芯之火			
Model Name	FX095-G1			
FCC ID	2BQML2025FX095G1			
Date of tests	Jun. 10, 2025 ~ Jul. 11, 2025	Jun. 10, 2025 ~ Jul. 11, 2025		
The tests have be	The tests have been carried out according to the requirements of the following standard:			
 ✓ FCC Part 90, Subpart R, S ✓ ANSI/TIA/EIA-603-E ✓ ANSI C63.26-2015 				
CONCLUSION: T	he submitted sample was found	to COMPLY with the test requirement		
	Prepared by Hanwen Xu Approved by Peibo Sun Engineer / Mobile Department Manager / Mobile Department			
Ru Hannen		Simpei bo		
Da	ate: Jul. 11, 2025	Date: Jul. 11, 2025		

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/ferms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



Table of Contents

1	SUMN	MARY OF TEST RESULTS	4
	1.1 M	IEASUREMENT UNCERTAINTY	Ę
		EST SITE AND INSTRUMENTS	
2	GENE	RAL INFORMATION	ς
_			
		ENERAL DESCRIPTION OF EUT	
		ONFIGURATION OF SYSTEM UNDER TEST	
		ESCRIPTION OF SUPPORT UNITS	
		ESCRIPTION OF TEST MODESENERAL DESCRIPTION OF APPLIED STANDARDS	
3	TEST	TYPES AND RESULTS	15
	3.1 O	UTPUT POWER MEASUREMENT	15
	3.1.1	LIMITS OF OUTPUT POWER MEASUREMENT	15
	3.1.2	TEST PROCEDURES	15
	3.1.3	TEST SETUP	16
	3.1.4	TEST RESULTS	
		REQUENCY STABILITY MEASUREMENT	
	3.2.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT	
	3.2.2	TEST PROCEDURE	
	3.2.3	TEST SETUP	
	3.2.4	TEST RESULTSCCUPIED BANDWIDTH MEASUREMENT	
	3.3 O 3.3.1	LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT	
	3.3.1	TEST SETUP	
	3.3.3	TEST PROCEDURES	
	3.3.4	TEST RESULTS	
		MISSION MASK MEASUREMENT	
	3.4.1	LIMITS OF EMISSION MASK MEASUREMENT	
	3.4.2	TEST SETUP	23
	3.4.3	TEST PROCEDURES	
	3.4.4	TEST RESULTS	
		ONDUCTED SPURIOUS EMISSIONS	
	3.5.1	LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT	
	3.5.2	TEST PROCEDURE	
	3.5.3	TEST SETUP	
	3.5.4	TEST RESULTS	_
		ADIATED EMISSION MEASUREMENTLIMITS OF RADIATED EMISSION MEASUREMENT	
	3.6.1 3.6.2	TEST PROCEDURES	
	3.6.3	DEVIATION FROM TEST STANDARD	
	3.6.4	TEST SETUP	
	3.6.5	TEST RESULTS	
		EAK TO AVERAGE RATIO	
	3.7.1	LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT	
	3.7.2	TEST SETUP	
	3.7.3		
	3.7.4	TEST RESULTS	
4	INIEO	RMATION ON THE TESTING LABORATORIES	ΛF
+	INFU	ANIATION ON THE TESTING LADURATURIES	40
5	MODI	FICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.	46
6	APPE	NDIX	47



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QSU2506090109RF05	Original release	Jul. 11, 2025

SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

Report Clause	Ref Std.Clause	Test Items	Result (Pass/Fail)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
3.3	1	Peak-to-Average Ratio	Reporting only	-
3.4	§2.1049	Occupied Bandwidth	Reporting only	-
3.5	§2.1053 §90.543(e)(2)	Conducted Band Edge Measurement	PASS	-
3.6	§2.1051 §90.210(n)	Emission Masks	PASS	-
3.7	§2.1053 §90.543(e)(3)	Conducted Spurious Emissions	PASS	-
3.8	§2.1055 §90.539(e)	Frequency Stability Temperature & Voltage	PASS	-
4.2	§2.1053 §90.543(e)(3) §90.543(f)	Radiated Spurious Emissions	PASS	Under limit 21.29dB at 1584.000MHz

*Test Lab Information Reference

Lab A:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China Accredited Test Lab Cert 6613.01

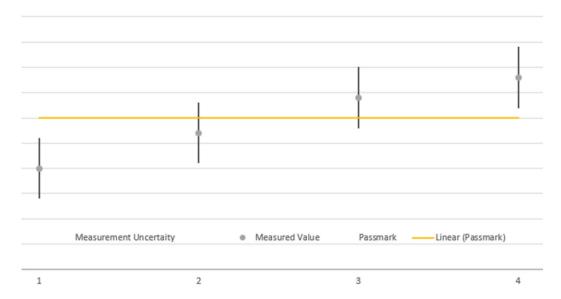
The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.66dB
Radiated emissions	9KHz ~ 30MHz	2.68dB
	30MHz ~ 1GHz	3.26dB
	1GHz ~ 18GHz	4.48dB
	18GHz ~ 40GHz	4.12dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.30,23	Aug.29,25
Pre-Amplifier	R&S	SCU08F1	101028	Jan.22,24	Jan.21,26
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A	182185	Mar.29,24	Mar.28,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ- EMC- 01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ- EMC- 02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Mar.28,24	Mar.27,26
EMI TEST Receiver	R&S	ESW44	101973	Mar.28,24	Mar.27,26
Bilog Antenna	SCHWARZBEC K	VULB 9163	1264	Jul.05,23	Jul.04,25
Bilog Antenna	SCHWARZBEC K	VULB 9163	1264	Jul.04,25	Jul.03,27
Horn Antenna	ETS- LINDGREN	3117	227836	Aug.22,23	Aug.21,25
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QIVIS 00000	23486	Jul.15,24	Jul.14,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Mar.22,25	Mar.21,27
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,25	Feb.21,27
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Test Software	EMC32	EMC32	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd		23062787	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	N/A	N/A
DC Source	HYELEC	HY3010B	551016	Aug.31,23	Aug.30,25
Hygrothermograph	DELI	20210528	SZ014	Mar.18,25	Mar.17,27
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC- AMI18843A(CABLE)	R&S	HF290-NMNM- 7.00M	N/A	N/A	N/A
TMC- AMI18843A(CABLE)	R&S	HF290-NMNM- 4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	W12.14	N/A	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20- 069	Apr.26,25	Apr.25,26
CABLE	R&S	J12J103539-00-1	SEP-03-20- 070	Apr.26,25	Apr.25,26
Temperature Chamber	votsch	VT4002	5856607810 0050	May.30,24	May.29,26

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008

NOTE:

- 1. The calibration interval of the above test instruments is 12 / 24/ 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
- 2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
- 3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 434559; The Designation No. is CN1325.



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	LTE Module			
BRAND NAME	芯芯之火			
MODEL NAME	FX095-G1			
NOMINAL VOLTAGE	3.8Vdc			
MODULATION TECHNOLOGY	LTE QPSK, 16QAM			
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	814.7MHz ~ 823.3MHz		
FREQUENCY RANGE	LTE Band 26 (Channel Bandwidth: 3MHz)	815.5MHz ~ 822.5MHz		
TREGOENOT RANGE	LTE Band 26 (Channel Bandwidth: 5MHz)	816.5MHz ~ 821.5MHz		
	LTE Band 26 (Channel Bandwidth: 10MHz)	819MHz		
	LTE Band 26	QPSK: 1M08G7D		
	(Channel Bandwidth: 1.4MHz)	16QAM: 1M09W7D		
	LTE Band 26	QPSK: 2M69G7D		
EMISSION DESIGNATOR	(Channel Bandwidth: 3MHz)	16QAM: 2M68W7D		
	LTE Band 26	QPSK: 4M50G7D		
	(Channel Bandwidth: 5MHz)	16QAM: 4M51W7D		
	LTE Band 26	QPSK: 8M95G7D		
	(Channel Bandwidth: 10MHz)	16QAM: 4M92W7D		
	LTE Band 26 (Channel Bandwidth: 1.4MHz)	76.56mW		
MAY FIDD DOWED	LTE Band 26 (Channel Bandwidth: 3MHz)	77.09mW		
MAX. EIRP POWER	LTE Band 26 (Channel Bandwidth: 5MHz)	76.21mW		
	LTE Band 26 (Channel Bandwidth: 10MHz)	77.62mW		
ANTENNA GAIN	-1.7dBi			
ANTENNA TYPE	Fixed External Antenna			
HW VERSION	FX095-G1_GLOBAL_V1.0			
SW VERSION	V4100LCB10004R00C0008			
I/O PORTS	Refer to user's manual			
DATA CABLE	N/A			
EXTREME TEMPERATURE	-35 ~75°C			
EXTREME VOLTAGE	3.4~4.5V			
NOTE:	<u> </u>			

NOTE:

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

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008

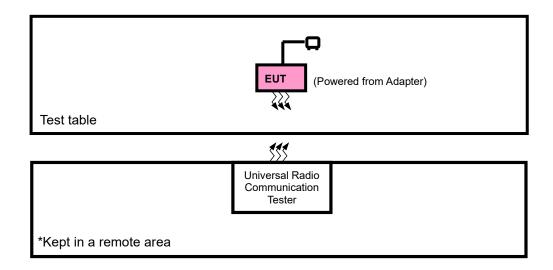


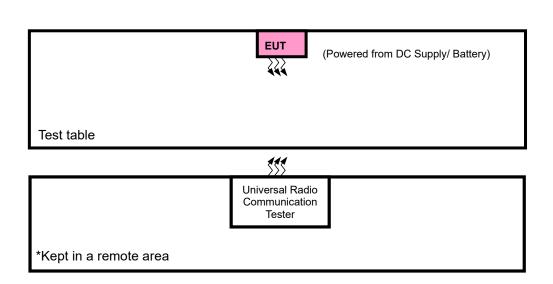
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receivers.

MODULATION MODE	TX FUNCTION	
LTE	1TX/1RX	

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

FOR RADIATION EMISSION TEST





2.3 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.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Adapter	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A

2.4 DESCRIPTION OF TEST MODES

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case in ERP/EIRP and radiated emission was found when positioned on Y-plane for LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
Α	EUT + Adapter + USB Cable with LTE link
В	EUT + DC Supply with LTE link

LTE BAND 26 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
		26697 to 26783	26697, 23330, 26783	1.4MHz	QPSK, 16QAM	1 RB / 0 RB offset
А	A ERP	26705 to 26775	26705, 23330, 26775	3MHz	QPSK, 16QAM	1 RB / 0 RB offset
		26715 to 26765	26715, 23330, 26765	5MHz	QPSK, 16QAM	1 RB / 0 RB offset
		23330	CHANNEL BANDWIDTH MODULATION 26697, 23330, 26783 1.4MHz QPSK, 16QAM 26705, 23330, 26775 3MHz QPSK, 16QAM 26715, 23330, 26715,	1 RB / 0 RB offset		
В	FREQUENCY STABILITY	23330	23330	10MHz	QPSK	50 RB / 0 RB offset
		26697 to 26783	, ,	1.4MHz	QPSK, 16QAM	6 RB / 0 RB offset
	OCCUPIED	26705 to 26775		3MHz	QPSK, 16QAM	15 RB / 0 RB offset
A	BANDWIDTH	26715 to 26765	, ,	5MHz	QPSK, 16QAM	25 RB / 0 RB offset
		23330	23330	10MHz	QPSK, 16QAM	50 RB / 0 RB offset
		2222	26697	1.4MHz	QPSK, 16QAM	1 RB / 0 RB offset 6 RB / 0 RB offset
		26697 to 26783				1 RB / 5 RB offset
			26783	1.4MHz	QPSK, 16QAM	6 RB / 0 RB offset
			26705	3MHz	QPSK, 16QAM	1 RB / 0 RB offset 15 RB / 0 RB offset
Α	BAND EDGE	26705 to 26775	26775	3MHz	OPSK 160AM	1 RB / 14 RB offset
			20170		Q1 011, 10 Q7 W1	15 RB / 0 RB offset
						1 RB / 0 RB offset
		26715 to 26765	26715	5MHz	QPSK, 16QAM	25 RB / 0 RB offset
		20,00	26765	5MHz	QPSK, 16QAM	1 RB / 24 RB offset



VEHILAS						
						25 RB / 0 RB offset
			23330	10MHz	QPSK, 16QAM	1 RB / 0 RB offset 50 RB / 0 RB offset
		23330				1 RB / 49 RB offset
			23330	10MHz	QPSK, 16QAM	50 RB / 0 RB offset
		26697 to 26783	26697, 23330, 26783	1.4MHz	QPSK	1 RB / 0 RB offset
А	CONDUCTED EMISSION	26705 to 26775	26705, 23330, 26775	3MHz	QPSK	1 RB / 0 RB offset
	EMISSION	26715 to 26765	26715, 23330, 26765	5MHz	QPSK	1 RB / 0 RB offset
		23330	23330	10MHz	QPSK	1 RB / 0 RB offset
А	PEAK-TO- AVERAGE RATIO	23330	23330	10MHz	QPSK,16QAM	1 RB / 0 RB offset
		26697 to 26783	26697, 23330, 26783	1.4MHz	QPSK	1 RB / 0 RB offset
А	A RADIATED 26 EMISSION 267	26705 to 26775	23330	3MHz	QPSK	1 RB / 0 RB offset
		26715 to 26765	23330	5MHz	QPSK	1 RB / 0 RB offset
		23330	23330	10MHz	QPSK	1 RB / 0 RB offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

TEST CONDITION								
TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY					
ERP	24deg. C, 60%RH	DC 3.8Vdc By Adapter	Hanwen Xu					
FREQUENCY STABILITY	24deg. C, 61%RH	DC 3.4V/ 3.8V/ 4.5V By Source	Hanwen Xu					
OCCUPIED BANDWIDTH	24deg. C, 61%RH	DC 3.8Vdc By Adapter	Hanwen Xu					
BAND EDGE	24deg. C, 61%RH	DC 3.8Vdc By Adapter	Hanwen Xu					
CONDUCTED EMISSION	24deg. C, 61%RH	DC 3.8Vdc By Adapter	Hanwen Xu					
RADIATED EMISSION	23deg. C, 70%RH	AC 120V/60Hz	Hanwen Xu					

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2 FCC 47 CFR Part 90 ANSI/TIA/EIA-603-D ANSI/TIA/EIA-603-E ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Per FCC Part 90.635(a)(b)

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

3.1.2 TEST PROCEDURES

EIRP / ERP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determing the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP or EIRP = P_{Meas} + G_T - L_C

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas}, typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

 G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

Lc = signal attenuation in the connecting cable between the transmitter and antenna, in dB

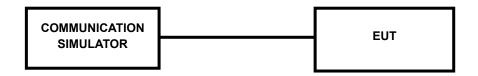
CONDUCTED POWER MEASUREMENT:

- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



For the actual test configuration, please refer to the attached file (Test Setup Photo).



3.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)

			L	TE Band 26		
Band/BW	Modulation	RB	RB	Low CH 26697	Mid CH 23330	High CH 26783
Bana, Bri	Modelation	Size	offset	Frequency 814.7 MHz	Frequency 819 MHz	Frequency 823.3 MHz
		1	0	22.26	22.25	22.10
		1	2	22.69	22.66	22.59
		1	5	22.25	22.33	22.17
	QPSK	3	0	22.57	22.58	22.53
		3	1	22.46	22.56	22.56
		3	3	22.33	22.47	22.17
00/4/4		6	0	22.33	22.41	22.32
26/ 1.4		1	0	21.22	21.21	20.99
		1	2	21.52	21.77	21.41
		1	5	21.43	21.45	21.40
	16QAM	3	0	21.78	21.85	21.67
		3	1	21.57	21.65	21.53
		3	3	21.44	21.59	21.32
		6	0	22.24	22.41	22.14
Band/BW	Modulation	RB	RB	Low CH 26705	Mid CH 23330	High CH 26775
Dallu/DVV	IVIOGUIATION	Size	e ffset	Frequency 815.5 MHz	Frequency 819 MHz	Frequency 822.5 MHz
		1	0	22.14	22.30	22.14
		1	12	22.58	22.72	22.56
		1	24	22.21	22.39	22.15
	QPSK	12	0	21.79	21.80	21.63
		12	6	21.65	21.76	21.69
		12	13	21.49	21.54	21.38
26/ 3		25	0	22.46	22.38	22.40
20/ 3		1	0	21.15	21.22	21.02
		1	12	21.61	21.72	21.46
		1	24	21.35	21.50	21.31
	16QAM	12	0	20.95	21.07	20.89
		12	6	20.82	20.85	20.73
		12	13	20.58	20.80	20.59
		25	0	22.31	22.45	22.21

	LTE Band 26										
Band/BW Modulation	RB	RB	Low CH 26715	Mid CH 23330	High CH 26765						
Dana/BVV	Band/BW Modulation	Size	offset	Frequency 816.5 MHz	Frequency 819 MHz	Frequency 821.5 MHz					
		1	0	22.21	22.26	22.15					
		1	12	22.67	22.67	22.55					
26/ 5	QPSK	1	24	22.28	22.38	22.13					
		12	0	21.77	21.80	21.73					
		12	6	21.71	21.76	21.66					

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



VERTIAS	•					
		12	13	21.49	21.67	21.40
		25	0	22.41	22.33	22.30
		1	0	21.19	21.33	20.96
		1	12	21.61	21.77	21.45
		1	24	21.39	21.48	21.39
	16QAM	12	0	20.93	21.06	20.87
		12	6	20.88	20.89	20.67
		12	13	20.63	20.75	20.63
		25	0	22.27	22.36	22.15
Band/BW	Modulation	RB	RB	1	Mid CH 23330	1
54147577	Woddiadon	Size	offset	1	Frequency 819 MHz	1
		1	0	1	22.34	1
		1	24	1	22.75	1
		1	49	1	22.45	1
	QPSK	25	0	1	21.93	1
		25	12	1	21.80	1
		25	25	1	21.68	1
26/ 10		50	0	1	22.48	1
26/ 10		1	0	1	21.35	1
		1	24	1	21.80	1
		1	49	1	21.56	1
	16QAM	25	0	1	21.12	/
		25	12	1	20.98	1
		25	25	1	20.86	1
		50	0	1	22.46	/

	ERP									
	LTE BAND 26									
		1.4N	IHz QPSK							
Channel	Channel Frequency (MHz) Conducted Power (dBm) G _T -L _C ERP (dBm) ERP (mW) (W)									
26697	814.7	22.69	-1.7	18.84	76.56	100				
23330	819	22.66	-1.7	18.81	76.03	100				
26783	823.3	22.59	-1.7	18.74	74.82	100				

	1.4MHz 16QAM									
Channel Frequency (MHz) Conducted Power (dBm) G _T -L _C (dB) (ERP (mW) (W) (V)										
26697	814.7	22.24	-1.7	18.39	69.02	100				
23330	819	22.41	-1.7	18.56	71.78	100				
26783	823.3	22.14	-1.7	18.29	67.45	100				



	3MHz QPSK									
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)				
26705	815.5	22.58	-1.7	18.73	74.64	100				
23330	819	22.72	-1.7	18.87	77.09	100				
26775	822.5	22.56	-1.7	18.71	74.30	100				

	3MHz 16QAM									
Channel Frequency (MHz) Conducted Power (dBm) G _T -L _C (dBm) ERP (mW) (W)										
26705	815.5	22.31	-1.7	18.46	70.15	100				
23330	819	22.45	-1.7	18.60	72.44	100				
26775	822.5	22.21	-1.7	18.36	68.55	100				

	5MHz QPSK									
Channel Frequency (MHz) Conducted Power (dBm) G _T -L _C ERP (mW) (W) (W										
26715	816.5	22.67	-1.7	18.82	76.21	100				
23330	819	22.67	-1.7	18.82	76.21	100				
26765	821.5	22.55	-1.7	18.70	74.13	100				

	5MHz 16QAM									
Channel	Frequency (MHz)	Conducted Power (dBm)	G _τ -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)				
26715	816.5	22.27	-1.7	18.42	69.50	100				
23330	819	22.36	-1.7	18.51	70.96	100				
26765	821.5	22.15	-1.7	18.30	67.61	100				

	10MHz QPSK										
Channel	Frequency (MHz)	Conducted Power (dBm)	G _τ -L _c (dB)	ERP (dBm)	ERP (mW)	Limit (W)					
23330	819	22.75	-1.7	18.90	77.62	100					
		10MI	Hz 16QAM								
Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	ERP (dBm)	ERP (mW)	Limit (W)					
23330	819	22.46	-1.7	18.61	72.61	100					

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

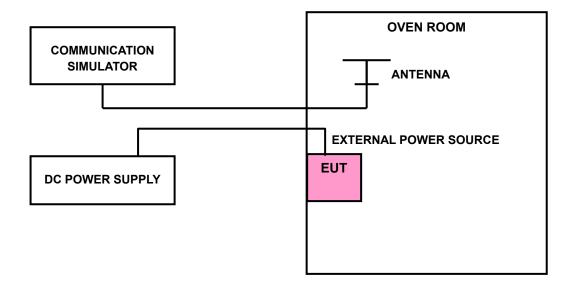
The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked

3.2.2 TEST PROCEDURE

- a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5 ^{\circ}$ C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP



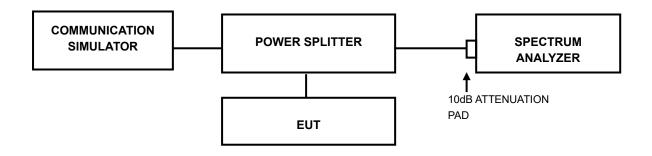
Please Refer to Appendix of this test report.

Note: VL = Low voltage(3.6V); VN/NV = Normal voltage(3.87V); VH = High voltage(4.45V); NT = Normal temperature (25° C)

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- a. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- b. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

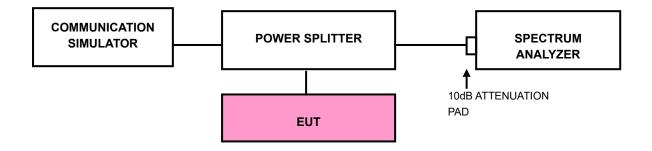
Please Refer to Appendix of this test report.

3.4.1 LIMITS OF EMISSION MASK MEASUREMENT

According to FCC part 90.691 shall be tested the emission mask. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

3.4.2 TEST SETUP



- a) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- b) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
- c) Set the resolution bandwidth (RBW) ≥ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- e) Set the video bandwidth (VBW) to $\ge 3 \times RBW$.
- f) Select the average power (RMS) display detector.
- g) Set the number of measurement points to ≥ 1001 .
- h) Use auto-coupled sweep time.
- i) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- j) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.
- k) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix of this test report.

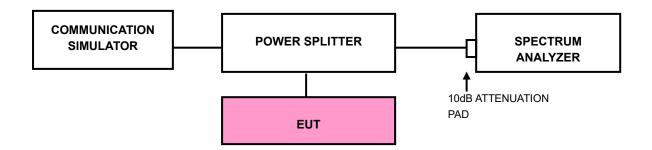
3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

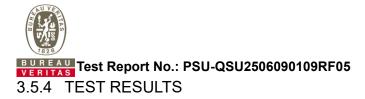
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to -13dBm

3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at middle operational frequency range.
- b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP





NOTE: The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix of this test report.

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

- (1)The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to -13dBm
- (2) For operations in the 763–775 MHz and 793–805 MHz bands, all emissions including harmonics in the band 1559– 1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

3.6.2 TEST PROCEDURES

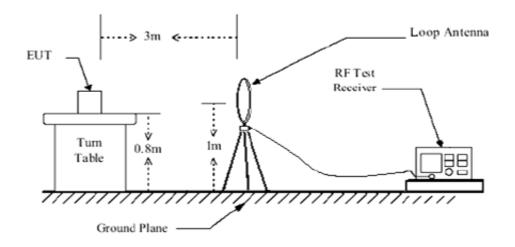
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power 2.15dBi.

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

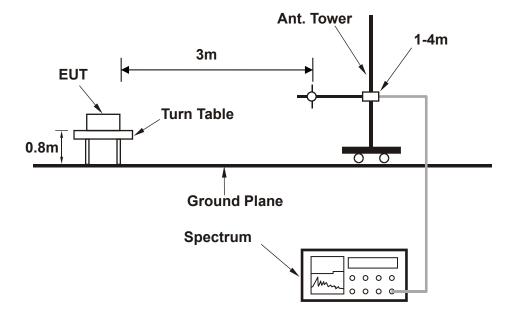
3.6.3 DEVIATION FROM TEST STANDARD

No deviation

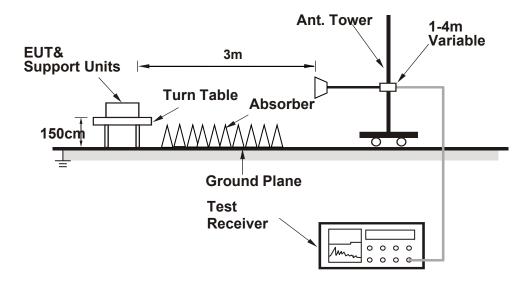
<Below 30MHz>



< Frequency Range 30MHz~1GHz >



< Frequency Range above 1GHz >



For the actual test configuration, please refer to the attached file (Test Setup Photo).

BELOW 1GHz WORST-CASE DATA

NOTE: The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

			CHANNEL	LTE Ba BANDWID	nd 26 TH: 1.4MHz	/ QPSK		
MOD	E		TX channel 2	26783	FREQUEN	CY RANGE	30 MHz ~ 1	IGHz
	RONMENTA DITIONS	\L	23deg. C, 70)%RH	INPUT POV	VER	AC 120V 6	0HZ
TES1	TED BY		Hanwen Xu					
	Α	NTENN	A POLARITY	' & TEST DI	STANCE: H	ORIZONTAL	AT 3 M	
Rg	Frequency [MHz]	PK+ Level [dBm]		PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	31.850	-67.46	-13.00	54.46	-0.55	Н	216.2	2.00
1	58.050	-76.54	-13.00	63.54	-3.64	Н	357.3	1.00
1	141.650	-70.24	-13.00	57.24	-14.46	Н	272.3	2.00
1	230.350	-68.79	-13.00	55.79	1.10	Н	267	1.00
1	351.400	-79.80	-13.00	66.80	-1.47	Н	359.1	1.00
1	440.200	-77.23	-13.00	64.23	1.66	Н	1	1.00
-50 -65 -65 -65 -65 -65 -65 -65 -65 -65 -65								
-70 -75 -80 -85 -90 -95 -100 -105 -110 -115 -120 -125		9		φ	φ	Φ	Φ	

40 M

O PK+ Level @CriticalPoint

-140

30 M

200 M

\rightarrow PK+ Limit @FCC_RSE_LTE_Band(2,4,5,12(17),25,26,35,36,42,66,71,72,77,78,85)_-13

600 M 700 M 800 M

400 M

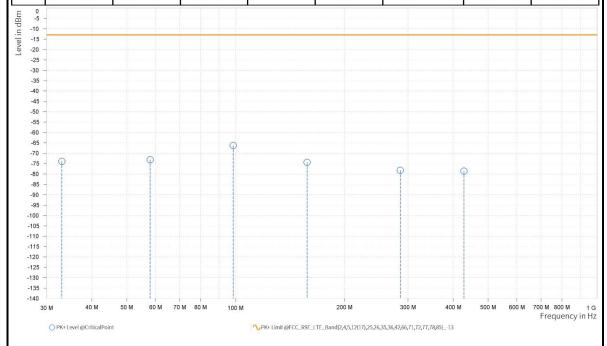
100 M



MODE	TX channel 26783	FREQUENCY RANGE	30 MHz ~ 1GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V 60HZ
TESTED BY	Hanwen Xu		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	33.050	-73.89	-13.00	60.89	-6.35	V	359	2.00
1	58.000	-73.14	-13.00	60.14	-4.00	V	4.9	1.00
1	98.450	-66.24	-13.00	53.24	4.65	V	4.9	1.00
1	157.700	-74.36	-13.00	61.36	-11.68	V	145	1.00
1	285.400	-78.25	-13.00	65.25	-1.23	V	354.6	1.00
1	428.300	- 78.61	-13.00	65.61	0.69	V	218.5	2.00





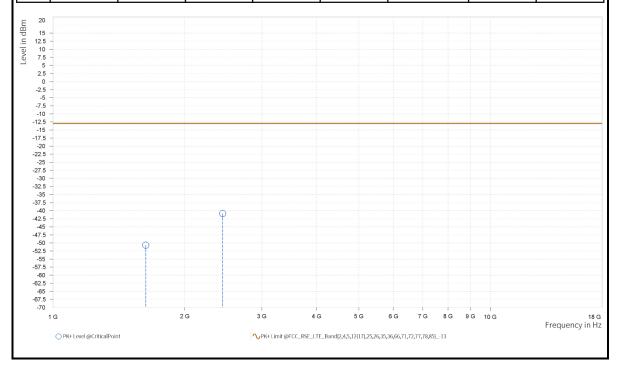
ABOVE 1GHz

Note: For higher frequency, the emission is too low to be detected.

LTE BAND 26										
CHANNEL BANDWIDTH 1.4MHz / QPSK MODE TX channel 20										
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH							
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu							

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,628.140	-50.70	-13.00	37.70	17.98	Н	359	2.00
3	2,442.500	-40.90	-13.00	27.90	24.53	Н	132.2	1.00





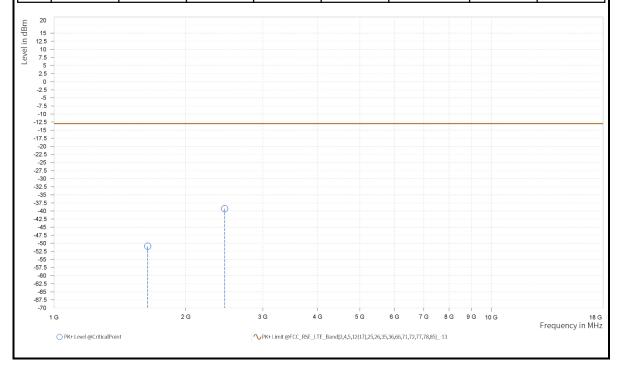
	NNEL DWIDTH		1.4MH	z/QPS	SK		MODE					TX ch	annel 26697	
FREC	QUENCY RA	ANGE	Above	1000M	lHz		ENVIRO CONDIT			A L		23deg	. C, 70%RH	
INPU	T POWER		AC 12	0V 60H	Z		TESTED BY				Hanwe	Hanwen Xu		
		ANTEN	NA PO	LARIT	/ & TEST I	DIS	TANCE:	VEF	RTIC	AL A	AT :	3 M		
Rg	Frequency [MHz]	PK+ Level [dBm]	[PK+ .imit IBm]	PK+ Margin [dB]	С	orrection [dB]	Ро	lariza	ation		Azimuth [deg]	Antenna Height [m]	
2	1,628.140	-51.13	-1	3.00	38.13		17.70		٧			359	2.00	
3	2,442.500	-46.12	! -1	3.00	33.12	T	24.36		٧			359	2.00	
2.5 0 -2.5 -5 -7.5 -10 -12.5 -17.5 -20 -22.5 -20 -22.5 -30 -32.5 -40 -42.5 -40 -42.5 -50 -50 -50 -50 -50 -50 -60 -60 -60 -60 -60 -60 -60 -6		9		φ										
-67.5 -70	1 G		2 G		3 G	G	5 G	6 G	7 G	8 G	9 G	10 G	18	



CHANNEL BANDWIDTH	1.4MHz / QPSK	MODE	TX channel 26740
FREQUENCY RANGE	Ι Δηρίζε 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,636.740	-50.91	-13.00	37.91	18.28	Н	291.2	2.00
3	2,455.500	-39.26	-13.00	26.26	24.72	Н	128.6	1.00





VERITAS Test Report No.: PSU-QSU2506090109RF05

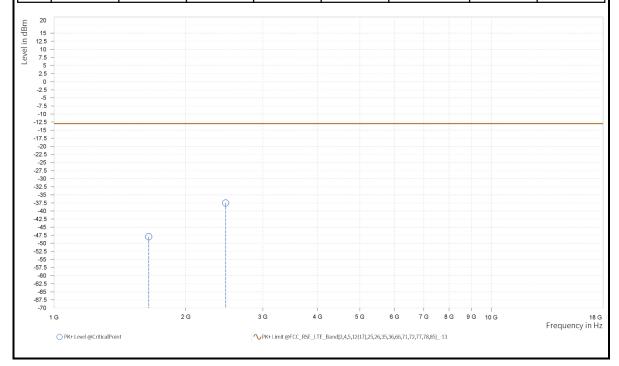
	NNEL DWIDTH		1.4MH	lz / QPS	SK		MODE					TX cha	nnel 26740
FREC	UENCY RA	ANGE	Above	1000M	Hz		ENVIRO CONDIT			\L		23deg.	C, 70%RH
NPU	T POWER		AC 12	0V 60H	Z		TESTED	BY				Hanwei	n Xu
		ANTEN	NA PO	LARITY	/ & TEST [)IS	TANCE:	VER [.]	TIC	AL A	٦3	М	
Rg	Frequency [MHz]	PK+ Level [dBm]	l l	PK+ .imit dBm]	PK+ Margin [dB]	Co	orrection [dB]	Pola	ariza	tion		zimuth [deg]	Antenna Height [m]
2	1,636.740	-50.02	2 -1	13.00	37.02		17.90		٧			2.3	2.00
3	2,455.110	-45.73	3 -1	13.00	32.73		24.47		٧			1	2.00
Egg 20 10:10:10:10:10:10:10:10:10:10:10:10:10:1		P	2G	0	3G 4	G	5G	0.00	7G	8G 9	G 10	DG	18 G Frequency in Hz



CHANNEL BANDWIDTH	1.4MHz / QPSK	MODE	TX channel 26783
FREQUENCY RANGE	Δhove 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	AC 120V 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,646.000	-47.96	-13.00	34.96	18.58	Н	359	2.00
3	2,468.000	-37.50	-13.00	24.50	24.52	Н	224.3	2.00





CHANNEL BANDWIDTH		1.4MHz / (QPSK	M	ODE				TX cha	annel 26783
FREQUENCY RA	ANGE	Above 100	00MHz			NMEN TIONS	ITAL		23deg	. C, 70%RH
NPUT POWER		AC 120V	60HZ	Т	ESTE	BY			Hanwe	en Xu
	ANTEN	NA POLAF	RITY & TES	T DISTA	NCE:	VERT	ICAL	AT:	3 M	
Rg Frequency [MHz]	PK+ Level [dBm]		Margii		ection dB]	Polar	izatio	n	Azimuth [deg]	Antenna Height [m]
2 1,646.000	-47.97	-13.0	34.97	1	8.08		٧		358.2	1.00
3 2,468.500	-42.95	-13.0	29.95	2	4.22		٧		1	1.00
E 20 D 15 D 16 D 10 10 10 7.5 5 2.5 -5 -7.5 -10 -12.5 -11 -17.5 -20 -22.5 -25 -25 -33 -33.5 -33.5 -340 -42.5 -45 -47.5 -50 -55.5 -55.5 -56 -57.5 -60 -62.5 -65 -67.5 -70	φ	Q Q 2G	3 G	4 G				96	10.6	



VERITAS Test Report No.: PSU-QSU2506090109RF05

CHAN BAND	NEL DWIDTH		3MHz	z / QPSK		MODE			TX chan	nel 26740
FREC	UENCY RA	NGE	Above	e 1000MI	Hz	ENVIRON CONDITION		ΓAL	23deg. C	C, 70%RH
INPU	T POWER		AC 12	20V 60H	Z	TESTED	BY		Hanwen	Xu
	Δ	NTENN	A POI	_ARITY &	& TEST DIS	TANCE: HC	RIZOI	NTAL A	T 3 M	
Rg	Frequency [MHz]	PK+ Leve [dBm	ı	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polar	ization	Azimuth [deg]	Antenna Height [m]
2	1,635.300	-49.83	3	-13.00	36.83	18.24		Н	293.5	2.00
3	2,453.000	-40.86	5	-13.00	27.86	24.59		Н	141.8	1.00
Egg 12.5 12.5 10.0 12.5 10.0 12.5 10.0 10.0 10.5 10.0		Φ		φ						
	1 G		2 G	!	3 G 4	5 G	6 G 7	G 8G 9	G 10 G	Frequency ir



	NNEL DWIDTH		3MHz	/ QPSK			MODE			MODE TX ch			nnel 26740
FREC	QUENCY RA	NGE	Above	1000M	Hz		ENVIRONMENTAL CONDITIONS					23deg.	C, 70%RH
INPU	T POWER		AC 12	0V 60H	Z		TESTED	BY				Hanwe	n Xu
		ANTEN	NA PO	LARITY	' & TEST [DIS	TANCE:	VER	TIC	AL A	Т 3	М	
Rg	Frequency [MHz]	PK+ Level [dBm]	L	PK+ .imit dBm]	PK+ Margin [dB]	C	orrection [dB]	Pol	ariza	ition		zimuth [deg]	Antenna Height [m]
2	1,635.300	-48.86	-1	13.00	35.86		17.87		٧			359	2.00
3	2,453.000	-45.89	-1	13.00	32.89		24.38		٧			133.4	1.00
Egg 15 10 12.5 10 10 12.5 10 10 12.5 10 10 12.5 15 15 15 15 15 15 15 15 15 15 15 15 15		φ		φ									
-67.5 -70	1 G		2 G		3 G 4	G	5 G	6 G	7 G	8 G	9 G 1	0 G	18 0



CHAI BANI	NNEL DWIDTH		5MHz / QF	PSK		MODE			TX cha	nnel 26740
FREG	QUENCY RA	NGE	Above 100	0MHz	MHz ENVIRONMENTAL CONDITIONS 230				23deg.	C, 70%RH
INPU	T POWER		AC 120V 6	0HZ		TESTED	BY		Hanwe	n Xu
	A	NTENN	A POLARIT	Y & TEST	DIST	ANCE: H	ORIZON	TAL A	ГЗ М	
Rg	Frequency [MHz]	PK+ Level [dBm]			in C	orrection [dB]	Polariza	tion	Azimuth [deg]	Antenna Height [m]
2	1,633.500	-47.24	-13.00	34.2	1	18.18	Н		111.8	1.00
3	2,450.250	-40.05	-13.00	27.0	5	24.47	Н		218.3	2.00
By 10 page 12.5	16	9	26	36	4 G	5G	6G 7G	8G 9G	10G	18 G Frequency in Hz



Rg Fr 2 1,	POWER requency [MHz] ,633.500		PK Lin	/ 60HZ	<u>2</u> & TEST D	TE	NDIT STED		TAL			C, 70%RH		
Rg Fr. 2 1,	requency [MHz]	PK+ Level	NA POLA	ARITY	& TEST [BY			Hanwer	n Xu		
2 1,	requency [MHz]	PK+ Level	PK Lin	(+		DISTA					Hanwen Xu			
2 1,	[MHz]	Level	Lin				NCE:	VERTI	CAL A	Г 3 Г	И			
	622 500		[dB		PK+ Margin [dB]		ction B]	Polari	zation		imuth deg]	Antenna Height [m]		
2 2	,633.500	-48.28	-13.	.00	35.28	17	83	,	/		359	2.00		
3 Z,	,450.250	-46.84	-13.	.00	33.84	24	24	,	/		359	2.00		
E 20		9	26	Φ	36 4	G	56	66 700	86 9	G 10	G	18 (



CHAN BANE	NNEL DWIDTH		10M	IHz / QPSł	<	MODE		TX chani	nel 26740	
FREC	UENCY RA	NGE	Abo	ve 1000Ml	Нz	ENVIRON CONDITION		23deg. C	, 70%RH	
INPU	T POWER		AC ²	120V 60HZ	7	TESTED	вү	Hanwen	wen Xu	
	A	NTENN	A PC	DLARITY 8	R TEST DIS	TANCE: HO	RIZONTAL A	Г 3 М		
Rg	Frequency [MHz]	PK+ Leve [dBm	ı	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	
2	1,629.000	-47.32	2	-13.00	34.32	18.00	Н	75.9	1.00	
3	2,443.500	-41.67	7	-13.00	28.67	24.52	Н	215.9	2.00	
Egg 12.5 12.5 10.0 12.5 10.0 12.5 10.0 10.0 10.5 10.0		φ		Φ						
	1 G O PK+ Level @CriticalPoin		2 G	,	3 G 4 G	5 G E_Band(2,4,5,12(17),25,26,35,		G 10 G	18 Frequency in	



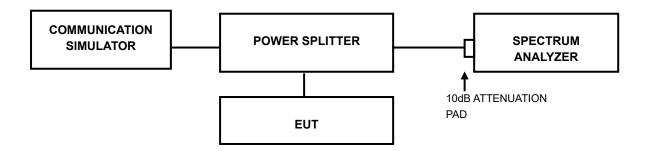
CHAN BANI	NNEL DWIDTH		10MH	lz / QPS	K		MODE	MODE				TX ch	anr	nel 26740
FREG	QUENCY RA	NGE	Above	e 1000M	lHz		ENVIRO CONDIT			۱L		23de	g. C	, 70%RH
INPU	T POWER		AC 12	20V 60H		TESTED BY					Hanw	Hanwen Xu		
		ANTEN	NA PC	LARIT	/ & TEST [ois	TANCE:	VER	TIC	AL A	Τ:	3 M		
Rg	Frequency [MHz]	PK+ Level [dBm]		PK+ Limit dBm]	PK+ Margin [dB]	С	orrection [dB]	Pol	ariza	tion		Azimuth [deg]		Antenna Height [m]
2	1,629.000	-48.72		13.00	35.72		17.70		٧			359.1		1.00
3	2,443.500	- 47.18	-	13.00	34.18		24.34		٧			359		2.00
Egg 15 12.5 10 10 12.5 10 10 10 10 10 10 10 10 10 10 10 10 10		P	26	φ	36		50	66	76	86	96			
	1 G ○ PK+ Level @CriticalPoin		2 G		3 G 4 √PK+Limit @FCC_RSE_L	G		6 G	7 G		9 G	10 G		18 G Frequency in H

3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.4 TEST RESULTS

Please Refer to Appendix of this test report.

4 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd., were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Huarui 7Layers High Technology (Suzhou) Co., Ltd. Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China Accredited Test Lab Cert 6613.01

If you have any comments, please feel free to contact us at the following:

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

LTE Band 26

APPENDIX

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
26(814- 824)	1.4MHz	QPSK	26697	1RB#0	5.34	13	PASS
26(814- 824)	1.4MHz	QPSK	26697	6RB#0	5.54	13	PASS
26(814- 824)	1.4MHz	QPSK	26740	1RB#0	5.67	13	PASS
26(814- 824)	1.4MHz	QPSK	26740	6RB#0	5.71	13	PASS
26(814- 824)	1.4MHz	QPSK	26783	1RB#0	5.46	13	PASS
26(814- 824)	1.4MHz	QPSK	26783	6RB#0	5.72	13	PASS
26(814- 824)	1.4MHz	16QAM	26697	1RB#0	6.16	13	PASS
26(814- 824)	1.4MHz	16QAM	26697	6RB#0	6.31	13	PASS
26(814- 824)	1.4MHz	16QAM	26740	1RB#0	6.17	13	PASS
26(814- 824)	1.4MHz	16QAM	26740	6RB#0	6.45	13	PASS
26(814- 824)	1.4MHz	16QAM	26783	1RB#0	6.73	13	PASS
26(814- 824)	1.4MHz	16QAM	26783	6RB#0	6.49	13	PASS
26(814- 824)	5MHz	QPSK	26705	1RB#0	5.46	13	PASS
26(814- 824)	5MHz	QPSK	26705	25RB#0	5.64	13	PASS
26(814- 824)	5MHz	QPSK	26740	1RB#0	5.77	13	PASS
26(814- 824)	5MHz	QPSK	26740	25RB#0	5.71	13	PASS
26(814- 824)	5MHz	QPSK	26775	1RB#0	5.38	13	PASS
26(814- 824)	5MHz	QPSK	26775	25RB#0	5.73	13	PASS
26(814- 824)	5MHz	16QAM	26705	1RB#0	5.83	13	PASS
26(814- 824)	5MHz	16QAM	26705	25RB#0	6.29	13	PASS
26(814- 824)	5MHz	16QAM	26740	1RB#0	6.29	13	PASS
26(814- 824)	5MHz	16QAM	26740	25RB#0	6.35	13	PASS
26(814- 824)	5MHz	16QAM	26775	1RB#0	5.93	13	PASS
26(814- 824)	5MHz	16QAM	26775	25RB#0	6.40	13	PASS
26(814- 824)	10MHz	QPSK	26740	1RB#0	5.42	13	PASS
26(814-	10MHz	QPSK	26740	50RB#0	5.56	13	PASS

Huarui 7layers High Technology (Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China

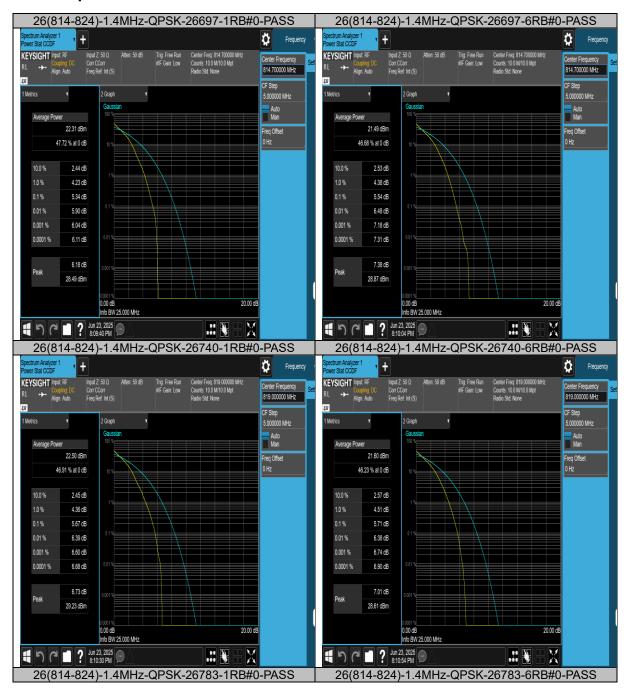
Tel: +86 (0557) 368 1008



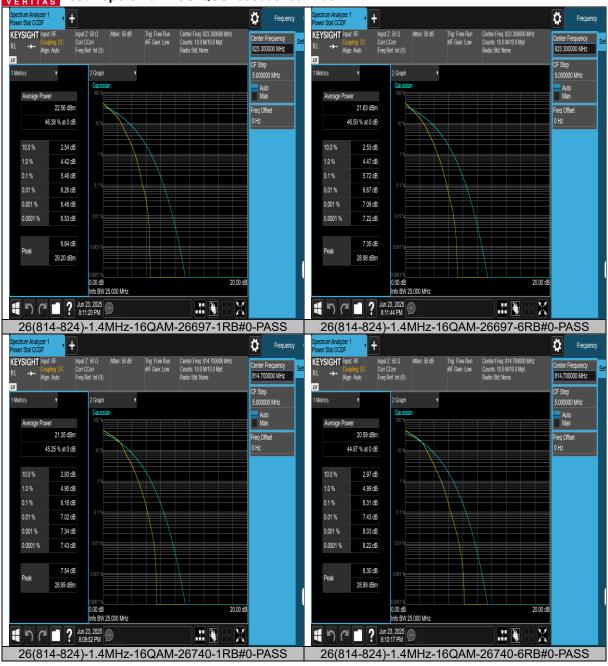
VERTIAS	•	•					
824)							
26(814- 824)	10MHz	16QAM	26740	1RB#0	6.32	13	PASS
26(814- 824)	10MHz	16QAM	26740	27RB#0	6.29	13	PASS



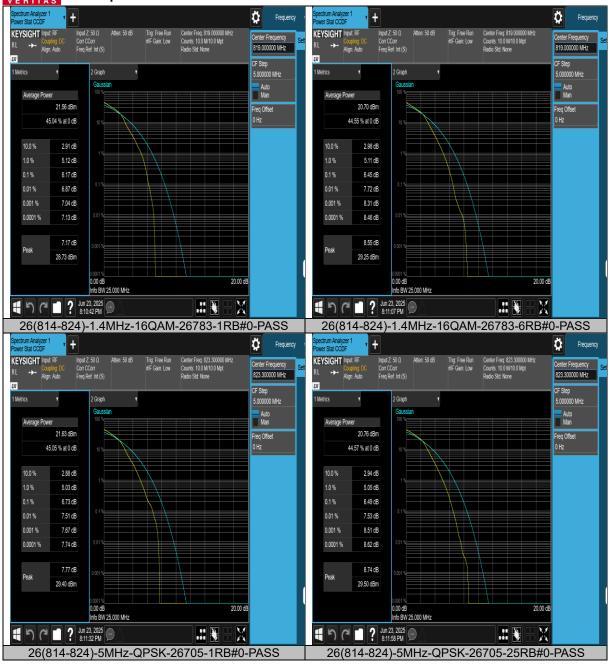
Test Graphs



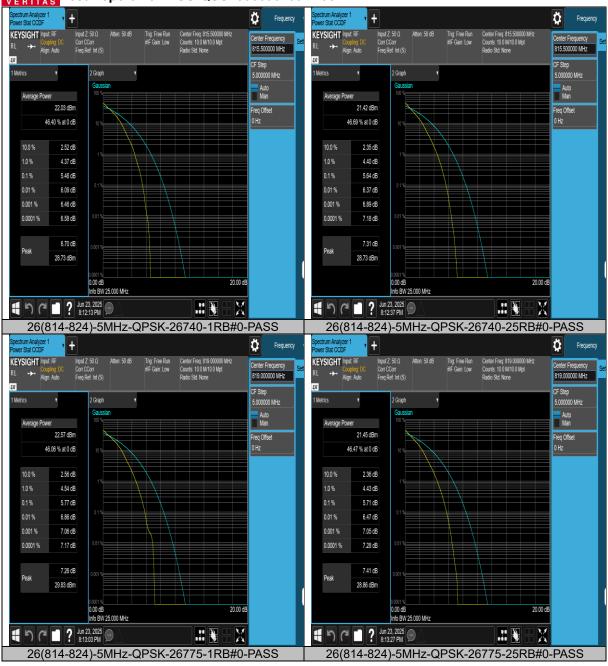




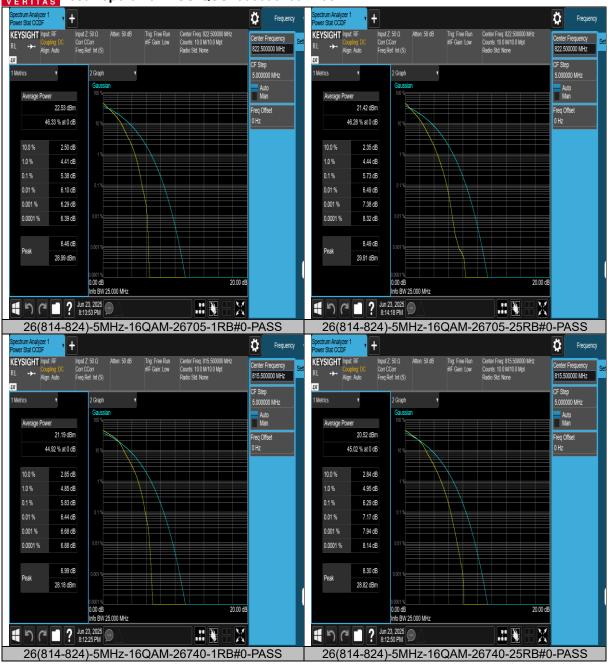




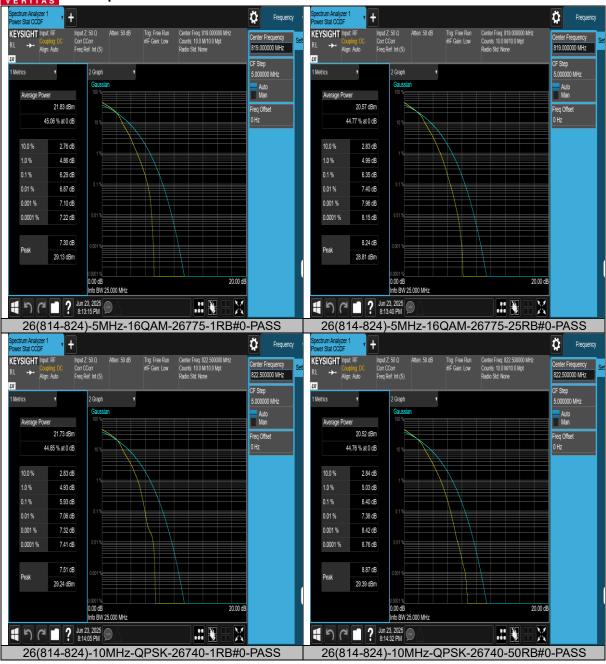




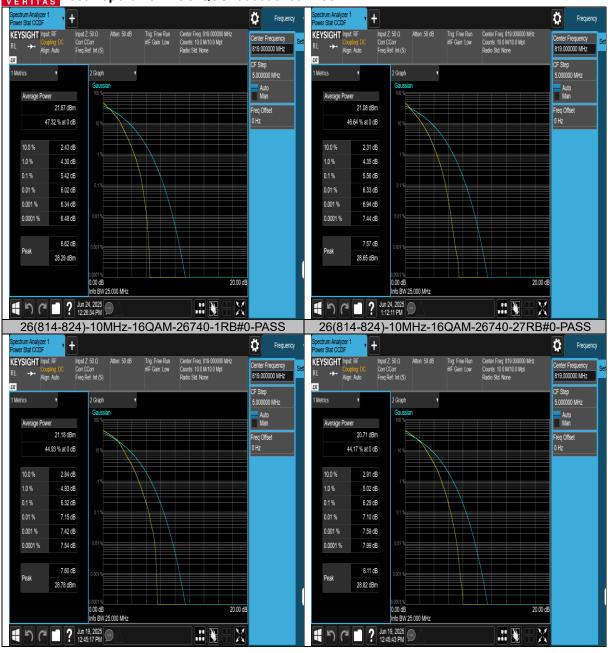












26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
26(814- 824)	1.4MHz	QPSK	26697	6RB#0	1.0815	1.178	PASS
26(814- 824)	1.4MHz	QPSK	26740	6RB#0	1.0822	1.177	PASS
26(814- 824)	1.4MHz	QPSK	26783	6RB#0	1.0803	1.177	PASS
26(814- 824)	1.4MHz	16QAM	26697	6RB#0	1.0846	1.180	PASS
26(814- 824)	1.4MHz	16QAM	26740	6RB#0	1.0860	1.179	PASS
26(814- 824)	1.4MHz	16QAM	26783	6RB#0	1.0844	1.178	PASS
26(814- 824)	3MHz	QPSK	26705	15RB#0	2.6864	2.846	PASS
26(814- 824)	3MHz	QPSK	26740	15RB#0	2.6823	2.847	PASS
26(814- 824)	3MHz	QPSK	26775	15RB#0	2.6841	2.845	PASS
26(814- 824)	3MHz	16QAM	26705	15RB#0	2.6785	2.842	PASS
26(814- 824)	3MHz	16QAM	26740	15RB#0	2.6806	2.840	PASS
26(814- 824)	3MHz	16QAM	26775	15RB#0	2.6783	2.844	PASS
26(814- 824)	5MHz	QPSK	26715	25RB#0	4.5006	4.846	PASS
26(814- 824)	5MHz	QPSK	26740	25RB#0	4.4932	4.833	PASS
26(814- 824)	5MHz	QPSK	26765	25RB#0	4.4990	4.850	PASS
26(814- 824)	5MHz	16QAM	26715	25RB#0	4.4901	4.828	PASS
26(814- 824)	5MHz	16QAM	26740	25RB#0	4.4947	4.843	PASS
26(814- 824)	5MHz	16QAM	26765	25RB#0	4.5137	4.841	PASS
26(814- 824)	10MHz	QPSK	26740	50RB#0	8.9458	9.645	PASS
26(814- 824)	10MHz	16QAM	26740	27RB#0	4.9161	6.023	PASS



Test Graphs





