



RADIO TEST REPORT

For

Shenzhen Huafurui Technology Co., Ltd.

Smartphone

Test Model: KINGKONG X

Prepared for : Shenzhen Huafurui Technology Co., Ltd.
Address : Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
Address : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel : (+86)755-82591330
Fax : (+86)755-82591332
Web : www.LCS-cert.com
Mail : webmaster@LCS-cert.com

Date of receipt of test sample : April 01, 2024
Number of tested samples : 2
Sample No. : A240319085-1, A240319085-2
Serial number : Prototype
Date of Test : April 01, 2024 ~ May 09, 2024
Date of Report : May 10, 2024





RADIO TEST REPORT	
ETSI EN 301 908-1 V15.2.1 (2023-01) & ETSI EN 301 908-13 V13.2.1 (2022-02)	
Report Reference No.	LCSA03214077EJ
Date of Issue	May 10, 2024
Testing Laboratory Name	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure ...	Full application of Harmonised standards <input checked="" type="checkbox"/> Partial application of Harmonised standards <input type="checkbox"/> Other standard testing method <input type="checkbox"/>
Applicant's Name	Shenzhen Huafului Technology Co., Ltd.
Address	Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Test Specification	
Standard	ETSI EN 301 908-1 V15.2.1 (2023-01) ETSI EN 301 908-13 V13.2.1 (2022-02)
Test Report Form No.	LCSEMC-1.0
TRF Originator	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	Dated 2017-06
Shenzhen LCS Compliance Testing Laboratory Ltd. All rights reserved.	
This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen LCS Compliance Testing Laboratory Ltd. is acknowledged as copyright owner and source of the material. Shenzhen LCS Compliance Testing Laboratory Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
Test Item Description	Smartphone
Trade Mark	CUBOT
Test Model	KINGKONG X
Ratings	Please Refer to Page 6
Result	Positive

Compiled by:

Supervised by:

Approved by:

Kevin Huang/ Administrator

Cary Luo/ Technique principal

Gavin Liang/ Manager



Shenzhen LCS Compliance Testing Laboratory Ltd.
 Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
 Scan code to check authenticity



RADIO -- TEST REPORT

Test Report No. : LCSA03214077EJ	<u>May 10, 2024</u> Date of issue
-----------------------------------------	--------------------------------------

Test Model.....	: KINGKONG X
EUT.....	: Smartphone
Applicant.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /
Manufacturer.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /
Factory.....	: Shenzhen Huafurui Technology Co., Ltd.
Address.....	: Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Telephone.....	: /
Fax.....	: /

Test Result	Positive
--------------------	-----------------

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.



Revision History

Report Version	Issue Date	Revision Content	Revised By
000	May 10, 2024	Initial Issue	---



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



TABLE OF CONTENTS

- 1. GENERAL INFORMATION6**
 - 1.1. PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)6
 - 1.2. SUPPORT EQUIPMENT LIST 10
 - 1.3. EXTERNAL I/O 10
 - 1.4. OBJECTIVE 10
 - 1.5. TEST CONDITIONS 11
 - 1.6. DESCRIPTION OF TEST MODE 11
 - 1.7. MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2) 12
 - 1.8. DESCRIPTION OF TEST FACILITY 12
- 2. SYSTEM TEST CONFIGURATION 13**
 - 2.1. JUSTIFICATION 13
 - 2.2. EUT EXERCISE SOFTWARE 13
 - 2.3. SPECIAL ACCESSORIES 13
 - 2.4. BLOCK DIAGRAM/SCHEMATICS 13
 - 2.5. EQUIPMENT MODIFICATIONS 13
 - 2.6. TEST SETUP 13
- 3. SUMMARY OF TEST RESULTS 14**
- 4. LIST OF MEASURING EQUIPMENT 17**
- 5. PHOTOGRAPHS OF TEST SETUP 18**
- 6. PHOTOGRAPHS OF THE EUT 18**





1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT	: Smartphone
Test Model	: KINGKONG X
Ratings	: Input: DC 5.0V, 3.0A Adapter1 Model: HJ-PD33W-EU For AC Adapter Input: 100-240V~, 50/60Hz, 0.8A Adapter Output: 5.0V=3.0A 15.0W OR 9.0V=3.0A 27.0W OR 12.0V=2.75A 33.0W MAX Adapter2 Model: ZYH-J330 For AC Adapter Input: 200-240V~, 50/60Hz, 1.2A Max Adapter Output: 5.0V=3.0A, 15.0W; 9.0V=3.0A, 27.0W; 12.0V=2.5A, 30.0W; 15.0V=2.0A, 30.0W; 20.0V=1.5A, 30.0W MAX DC 3.87V by Rechargeable Li-ion Battery, 10200mAh
Hardware Version	: G2365-MUB-V2-BOM3
Software Version	: CUBOT_KINGKONG X_E021C_V01
Bluetooth	:
Frequency Range	: 2402MHz~2480MHz
Channel Number	: 79 channels for Bluetooth V5.2 (BDR/EDR) 40 channels for Bluetooth V5.2 (BT LE/ BT 2LE)
Channel Spacing	: 1MHz for Bluetooth V5.2 (BDR/EDR) 2MHz for Bluetooth V5.2 (BT LE/ BT 2LE)
Modulation Type	: GFSK, $\pi/4$ -DQPSK, 8-DPSK for Bluetooth V5.2 (BDR/EDR) GFSK for Bluetooth V5.2 (BT LE/ BT 2LE)
Bluetooth Version	: V5.2
Antenna Description	: FPC Antenna, 0.6dBi(Max.)
WIFI(2.4G Band)	:
Frequency Range	: 2412MHz~2472MHz
Channel Spacing	: 5MHz
Channel Number	: 13 Channel for 20MHz bandwidth(2412~2472MHz) 9 channels for 40MHz bandwidth(2422~2462MHz)
Modulation Type	: 802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Description	: FPC Antenna, 0.6dBi(Max.)
WIFI(5.2G Band)	:
Frequency Range	: 5180MHz~5240MHz
Channel Number	: 4 channels for 20MHz bandwidth(5180~5240MHz) 2 channels for 40MHz bandwidth(5190~5230MHz)





1 channels for 80MHz bandwidth(5210MHz)

Modulation Type : 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna Description : Ant6: FPC Antenna, 0.4dBi(Max.)
 Ant7: FPC Antenna, -1.6dBi(Max.)

WIFI(5.8G Band) :

Frequency Range : 5745MHz~5825MHz

Channel Number : 5 channels for 20MHz bandwidth(5745~5825MHz)
 2 channels for 40MHz bandwidth(5755~5795MHz)
 1 channels for 80MHz bandwidth(5775MHz)

Modulation Type : 802.11a/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna Description : Ant6: FPC Antenna, 0.4dBi(Max.)
 Ant7: FPC Antenna, -1.6dBi(Max.)

2G :

Support Band : GSM 900 (EU-Band) DCS 1800 (EU-Band)
 GSM 850 (U.S.-Band) PCS 1900 (U.S.-Band)

Release Version : R99

GPRS Class : Class 12

EGPRS Class : Class 12

Uplink : GSM 900: 880MHz~915MHz
 DCS 1800: 1710MHz~1785MHz

Downlink : GSM 900: 925MHz~960MHz
 DCS 1800: 1805MHz~1880MHz

Type Of Modulation : GMSK for GSM/GPRS; GMSK/8PSK for EGPRS

Antenna Description : FPC Antenna
 -1.3dBi (max.) For GSM 900
 -3.0dBi (max.) For DCS 1800

Power Class : GSM 900: Level 5, DCS 1800: Level 0
 EGPRS 900: Level 8, EGPRS 1800: Level 2

3G :

Support Band : WCDMA Band I (EU-Band)
 WCDMA Band VIII (EU-Band)

Release Version : R8

Uplink : WCDMA Band I: 1920MHz~1980MHz
 WCDMA Band VIII: 880MHz~915MHz

Downlink : WCDMA Band I: 2110MHz~2170MHz
 WCDMA Band VIII: 925MHz~960MHz

Type Of Modulation : QPSK/16QAM

Antenna Description : FPC Antenna
 -2.5dBi (max.) For WCDMA Band I





-1.3dBi (max.) For WCDMA Band VIII

Power Class : Level 3

LTE :

- Support Band : E-UTRA Band 1(EU-Band)
- E-UTRA Band 3(EU-Band)
- E-UTRA Band 7(EU-Band)
- E-UTRA Band 8(EU-Band)
- E-UTRA Band 20(EU-Band)
- E-UTRA Band 28(EU-Band)
- E-UTRA Band 38(EU-Band)
- E-UTRA Band 40(EU-Band)

LTE Release Version : R12

- FDD Band : Uplink: E-UTRA Band 1: 1920MHz~1980MHz
- E-UTRA Band 3: 1710MHz~1785MHz
- E-UTRA Band 7: 2500MHz~2570MHz
- E-UTRA Band 8: 880MHz~915MHz
- E-UTRA Band 20: 832MHz~862MHz
- E-UTRA Band 28: 703MHz~748MHz
- Downlink: E-UTRA Band 1: 2110MHz~2170MHz
- E-UTRA Band 3: 1805MHz~1880MHz
- E-UTRA Band 7: 2620MHz~2690MHz
- E-UTRA Band 8: 925MHz~960MHz
- E-UTRA Band 20: 791MHz~821MHz
- E-UTRA Band 28: 758MHz~803MHz

- TDD Band : E-UTRA Band 38: 2570MHz ~ 2620MHz
- E-UTRA Band 40: 2300MHz ~ 2400MHz

Type Of Modulation : QPSK/16QAM

- Antenna Description : FPC Antenna
- 2.5dBi (max.) For E-UTRA Band 1
- 2.6dBi (max.) For E-UTRA Band 3
- 0.6dBi (max.) For E-UTRA Band 7
- 1.3dBi (max.) For E-UTRA Band 8
- 1.0dBi (max.) For E-UTRA Band 20
- 3.3dBi (max.) For E-UTRA Band 28
- 0.6dBi (max.) For E-UTRA Band 38
- 1.5dBi (max.) For E-UTRA Band 40

Power Class : Class 3

NR :

- Operation Band : n1: UL: 1920MHz~1980MHz, DL: 2110MHz~2170MHz
- n3: UL: 1710MHz~1785MHz, DL:1805MHz~1880MHz
- n7: UL: 2500MHz~2570MHz, DL: 2620MHz~2690MHz





Support Type : SA

Sub carrier Spacing : 15KHz

Modulation Type : DFT-BPSK, DFT-QPSK, DFT-16QAM, DFT-64QAM, DFT-256QAM, CP-QPSK, CP-16QAM, CP-64QAM, CP-256QAM

NR Release Version : 15

Power Class : NR Band 1/3/7: PC3

Antenna Description : FPC Antenna
n1: -2.5dBi Max
n3: -2.6dBi Max
n7: -0.6dBi Max

GPS Receiver :

Receive Frequency : 1575.42MHz

Channel Number : 1

Antenna Description : FPC Antenna, 3.9dBi(Max.)

GLONASS Receiver :

Receive Frequency : 1602.5625MHz

Channel Number : 1

Antenna Description : FPC Antenna, 3.9dBi(Max.)

Galileo Receiver :

Receive Frequency : 1589.74MHz

Channel Number : 1

Antenna Description : FPC Antenna, 3.9dBi(Max.)

BDS Receiver :

Receive Frequency : 1561.098MHz

Channel Number : 1

Antenna Description : FPC Antenna, 3.9dBi(Max.)

NFC :

Frequency Range : 13.56MHz

Modulation Type : ASK

Antenna Description : FPC Antenna, 0dBi(Max.)





1.2. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
Shenzhen Huajin Electronics Co., Ltd	Fast Charger	HJ-PD33W-EU	---	CE
Zhengyuhong Electronics (dongguan) Co., Ltd	AC Power Adapter	ZYH-J330	---	CE

1.3. External I/O

I/O Port Description	Quantity	Cable
Type-C USB Port	1	USB Cable: 1.0m, unshielded
Headphone Port	1	Headphone Cable: 1.2m, unshielded

1.4. Objective

Standard Referenced	Standard Title	Standard Version
ETSI EN 301 908-1	IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 1: Introduction and common requirements; Release 15	V15.2.1 (2023-01)
ETSI EN 301 908-13	IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)	V13.2.1 (2022-02)
ETSI TS 136 521-1	LTE; Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: Conformance testing (3GPP TS 36.521-1 version 16.9.0 Release 16)	V16.9.0 (2021-03)

The objective is to determine compliance with ETSI EN 301 908-1 V15.2.1 (2023-01) & ETSI EN 301 908-13 V13.2.1 (2022-02).





1.5. Test Conditions

Conditions	Temperature	Voltage
Normal	21-25°C	DC 3.87V
Low extreme Temperature/Low extreme Voltage (TL/VL);	-20°C	DC 3.48V
Low extreme Temperature/High extreme Voltage (TL/VH);	-20°C	DC 4.45V
High extreme Temperature/Low extreme Voltage (TH/VL);	45°C	DC 3.48V
High extreme Temperature/High extreme Voltage (TH/VH).	45°C	DC 4.45V

Note1: For all conditions, the humidity range is: 40-75%, the pressure range is 86-106kPa. The High Voltage DC 4.45V and Low Voltage DC 3.48V was declared by manufacturer

1.6. Description Of Test Mode

The following operating modes were applied for the related test items. For radiated measurement, the test was performed with EUT in X, Y, Z position and the worse case was found when EUT in Y position. All test modes were tested, only the result of the worst case was recorded in the report.

Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
	1.4	3	5	10	15	20	QPSK	16QAM	1	Part	Full	L	M	H
1	N/A	N/A	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
3	Y	/	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
7	N/A	N/A	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
8	Y	/	Y	Y	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y
20	N/A	N/A	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
28	N/A	Y	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
38	N/A	N/A	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y
40	N/A	N/A	Y	/	/	Y	Y	Y	Y	Y	Y	Y	Y	Y

Note:

- 1)The mark "Y" means that this configuration is chosen for testing.
- 2)The mark "/" means that this bandwidth is supported but is not chosen for testing.
- 3)The mark "N/A" means that this bandwidth is not supported.



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



1.7. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Radio Frequency	0.9 x 10 ⁻⁴
Total RF Power, Conducted	1.0 dB
RF Power Density, Conducted	1.8 dB
Spurious Emissions, Conducted	1.8 dB
All Emissions, Radiated	3.1 dB
Temperature	0.5°C
Humidity	1 %
DC And Low Frequency Voltages	1 %

1.8. Description of Test Facility

- NVLAP Accreditation Code is 600167-0.
- FCC Designation Number is CN5024.
- CAB identifier is CN0071.
- CNAS Registration Number is L4595.



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



2. SYSTEM TEST CONFIGURATION

2.1. Justification

N/A

2.2. EUT Exercise Software

N/A

2.3. Special Accessories

The special accessories were supplied by Shenzhen LCS Compliance Testing Laboratory Ltd.

2.4. Block Diagram/Schematics

Please refer to the related document.

2.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

2.6. Test Setup

Please refer to the test setup photo.





3. SUMMARY OF TEST RESULTS

Test Engineer	:	Paddi Chen
Temperature/ Humidity:	:	23.6°C/ 52.8%

Reference Clause No. (ETSI EN 301 908-13)	Description of Test Items	Result					
		E-UTRA Band					
		Band 1	Band 3	Band 7	Band 8	Band 20	Band 28
4.2.2	Transmitter Maximum Output Power						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
	TL/ML	Pass	Pass	Pass	Pass	Pass	Pass
	TL/VH	Pass	Pass	Pass	Pass	Pass	Pass
	TH/ML	Pass	Pass	Pass	Pass	Pass	Pass
4.2.5	Transmitter Minimum Output Power						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
	TL/ML	Pass	Pass	Pass	Pass	Pass	Pass
	TL/VH	Pass	Pass	Pass	Pass	Pass	Pass
	TH/ML	Pass	Pass	Pass	Pass	Pass	Pass
4.2.3	Transmitter Spectrum Emission Mask						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.11	Transmitter Adjacent Channel Leakage Power Ratio						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
	TL/ML	Pass	Pass	Pass	Pass	Pass	Pass
	TL/VH	Pass	Pass	Pass	Pass	Pass	Pass
	TH/ML	Pass	Pass	Pass	Pass	Pass	Pass
4.2.4	Transmitter Spurious Emissions						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.10	Receiver Spurious Emissions						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.6	Receiver Adjacent Channel Selectivity (ACS)						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.7	Receiver Blocking Characteristics						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.8	Receiver Spurious Response						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.9	Receiver Intermodulation Characteristics						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



4.2.12	Receiver Reference Sensitivity Level						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
	TL/VL	Pass	Pass	Pass	Pass	Pass	Pass
	TL/VH	Pass	Pass	Pass	Pass	Pass	Pass
	TH/VL	Pass	Pass	Pass	Pass	Pass	Pass
	TH/VH	Pass	Pass	Pass	Pass	Pass	Pass

Reference Clause No. (ETSI EN 301 908-1)	Description of Test Items	Result					
		E-UTRA Band					
		Band 1	Band 3	Band 7	Band 8	Band 20	Band 28
4.2.2	Radiated emissions (UE)						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass
4.2.4	Control and monitoring functions (UE)						
	Normal	Pass	Pass	Pass	Pass	Pass	Pass

Reference Clause No. (ETSI EN 301 908-13)	Description of Test Items	Result	
		E-UTRA Band	
		Band 38	Band 40
4.2.2	Transmitter Maximum Output Power		
	Normal	Pass	Pass
	TL/VL	Pass	Pass
	TL/VH	Pass	Pass
	TH/ML	Pass	Pass
	TH/VH	Pass	Pass
4.2.5	Transmitter Minimum Output Power		
	Normal	Pass	Pass
	TL/VL	Pass	Pass
	TL/VH	Pass	Pass
	TH/ML	Pass	Pass
	TH/VH	Pass	Pass
4.2.3	Transmitter Spectrum Emission Mask		
	Normal	Pass	Pass
4.2.11	Transmitter Adjacent Channel Leakage Power Ratio		
	Normal	Pass	Pass
	TL/VL	Pass	Pass
	TL/VH	Pass	Pass
	TH/ML	Pass	Pass
	TH/VH	Pass	Pass
4.2.4	Transmitter Spurious Emissions		
	Normal	Pass	Pass
4.2.10	Receiver Spurious Emissions		





	Normal	Pass	Pass
4.2.6	Receiver Adjacent Channel Selectivity (ACS)		
	Normal	Pass	Pass
4.2.7	Receiver Blocking Characteristics		
	Normal	Pass	Pass
4.2.8	Receiver Spurious Response		
	Normal	Pass	Pass
4.2.9	Receiver Intermodulation Characteristics		
	Normal	Pass	Pass
4.2.12	Receiver Reference Sensitivity Level		
	Normal	Pass	Pass
	TL/VL	Pass	Pass
	TL/VH	Pass	Pass
	TH/VL	Pass	Pass
4.2.2	Radiated emissions (UE)		
	Normal	Pass	Pass
4.2.4	Control and monitoring functions (UE)		
	Normal	Pass	Pass

Reference Clause No. (ETSI EN 301 908-1)	Description of Test Items	Result	
		E-UTRA Band	
		Band 38	Band 40
4.2.2	Radiated emissions (UE)		
	Normal	Pass	Pass
4.2.4	Control and monitoring functions (UE)		
	Normal	Pass	Pass

***Note:

Result: Describes test result of Test Case.

Pass: Test Case passed on specified conformance test platform.

Normal(TN/VN): Normal temperature – 25°C; Normal voltage. – DC 3.87V

TH: High extreme Temperature – +45°C

VH: High extreme Voltage – DC 4.45V

TL: Low extreme Temperature – -20°C

VL: Low extreme Voltage – DC 3.48V

N/A: Not applicable.

–: Not test.





4. LIST OF MEASURING EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	LTE Test Software	Tonscend	JS1120-1	N/A	N/A	N/A
2	RF Control Unit	Tonscend	JS0806-1	158060009	2023-10-18	2024-10-17
3	MXA Signal Analyzer	Agilent	N9020A	MY51250905	2023-10-18	2024-10-17
4	DC Power Supply	Agilent	E3642A	N/A	2023-10-18	2024-10-17
5	MXG Vector Signal Generator	Agilent	N5182A	MY47071151	2023-06-09	2024-06-08
6	PSG Analog Signal Generator	Agilent	E8257D	MY4520521	2023-06-09	2024-06-08
7	Temperature & Humidity Chamber	GUANGZHOU GOGNWEN	GDS-100	70932	2023-10-05	2024-10-04
8	EMI Test Software	Farad	EZ	/	N/A	N/A
9	3m Full Anechoic Chamber	MRDIANZI	FAC-3M	MR009	2022-08-17	2025-08-16
10	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
11	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	00005	2021-08-29	2024-08-28
12	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
13	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
14	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	791	2021-08-29	2024-08-28
15	Broadband Preamplifier	SCHWARZBECK	BBV9719	9719-025	2021-08-29	2024-08-28
16	EMI Test Receiver	R&S	ESR 7	101181	2023-08-15	2024-08-14
17	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2023-07-17	2024-07-16
18	Low-frequency amplifier	SchwarzZBECK	BBV9745	00253	2023-10-18	2024-10-17
19	High-frequency amplifier	JS Denki Pte	PA0118-43	JSPA21009	2023-10-18	2024-10-17
20	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	2023-06-09	2024-06-08
21	RF Filter	Micro-Tronics	BRC50718	017	2023-10-18	2024-10-17
22	RF Filter	Micro-Tronics	BRC50719	011	2023-10-18	2024-10-17
23	RF Filter	Micro-Tronics	BRC50720	011	2023-10-18	2024-10-17
24	RF Filter	Micro-Tronics	BRC50721	013	2023-10-18	2024-10-17
25	RF Filter	Micro-Tronics	BRM50702	195	2023-08-15	2024-08-14
26	6dB Attenuator	/	100W/6dB	1172040	2023-06-09	2024-06-08
27	3dB Attenuator	/	2N-3dB	/	2023-10-18	2024-10-17



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



5. PHOTOGRAPHS OF TEST SETUP

Please refer to separated files Appendix D for Photographs of Test Setup_RF.

6. PHOTOGRAPHS OF THE EUT

Please refer to separated files Appendix C for Photographs of The EUT.



**Annex A****Transmitter maximum output power**

The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 1					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
5MHz	Low Range	1	1RB#0	22.42	20.3~25.7
			8RB#0	22.27	20.3~25.7
	Mid Range	1	1RB#0	22.45	20.3~25.7
			8RB#0	22.53	20.3~25.7
	High Range	1	1RB#24	22.22	20.3~25.7
			8RB#17	22.27	20.3~25.7
20MHz	Low Range	1	1RB#0	22.27	20.3~25.7
			18RB#0	21.93	20.3~25.7
	Mid Range	1	1RB#0	22.16	20.3~25.7
			18RB#0	22.24	20.3~25.7
	High Range	1	1RB#99	22.33	20.3~25.7
			18RB#82	22.26	20.3~25.7

The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 3					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
1.4MHz	Low Range	1	1RB#0	22.10	20.3~25.7
	Mid Range	1	1RB#0	21.90	20.3~25.7
	High Range	1	1RB#0 5RB#0	21.71 21.90	20.3~25.7 20.3~25.7
5MHz	Low Range	1	1RB#0	22.09	20.3~25.7
			1RB#24	22.20	20.3~25.7
	Mid Range	1	1RB#0	22.19	20.3~25.7
			1RB#24	22.02	20.3~25.7
	High Range	1	1RB#0	21.97	20.3~25.7
			1RB#24 8RB#0	21.79 21.88	20.3~25.7 20.3~25.7
20MHz	Low Range	1	1RB#0	22.14	20.3~25.7
			1RB#99	22.42	20.3~25.7
	Mid Range	1	1RB#0	22.36	20.3~25.7
			1RB#99	22.24	20.3~25.7
	High Range	1	1RB#0	22.19	20.3~25.7
			1RB#99 18RB#0	22.03 22.15	20.3~25.7 20.3~25.7



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 7					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
5MHz	Low Range	1	1RB#0	21.52	20.3~25.7
			1RB#24	21.46	20.3~25.7
	Mid Range	1	1RB#0	21.24	20.3~25.7
			1RB#24	21.32	20.3~25.7
	High Range	1	1RB#0	21.51	20.3~25.7
			1RB#24	21.45	20.3~25.7
20MHz	Low Range	1	1RB#0	21.34	20.3~25.7
			1RB#99	21.62	20.3~25.7
	Mid Range	1	1RB#0	21.50	20.3~25.7
			1RB#99	21.29	20.3~25.7
	High Range	1	1RB#0	21.61	20.3~25.7
			1RB#99	21.60	20.3~25.7
			18RB#0	21.57	20.3~25.7
			18RB#0	21.57	20.3~25.7

The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 8					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
1.4MHz	Low Range	1	1RB#0	24.01	20.3~25.7
	Mid Range	1	1RB#0	23.61	20.3~25.7
	High Range	1	1RB#0	23.52	20.3~25.7
5MHz	Low Range	1	1RB#0	23.84	20.3~25.7
			1RB#24	23.76	20.3~25.7
	Mid Range	1	1RB#0	23.51	20.3~25.7
			1RB#24	23.58	20.3~25.7
	High Range	1	1RB#0	23.51	20.3~25.7
			1RB#24	23.54	20.3~25.7
10MHz	Low Range	1	1RB#0	23.82	20.3~25.7
			1RB#49	23.67	20.3~25.7
	Mid Range	1	1RB#0	23.54	20.3~25.7
			1RB#49	23.56	20.3~25.7
	High Range	1	1RB#0	23.66	20.3~25.7
			1RB#49	23.50	20.3~25.7
			12RB#0	23.57	20.3~25.7





The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 20					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
5MHz	Low Range	1	1RB#0	24.28	20.3~25.7
			1RB#24	24.13	20.3~25.7
	Mid Range	1	1RB#0	23.77	20.3~25.7
			1RB#24	23.80	20.3~25.7
	High Range	1	1RB#0	24.04	20.3~25.7
			1RB#24	23.98	20.3~25.7
20MHz	Low Range	1	1RB#0	24.29	20.3~25.7
			1RB#99	23.97	20.3~25.7
	Mid Range	1	1RB#0	24.04	20.3~25.7
			1RB#99	23.87	20.3~25.7
	High Range	1	1RB#0	24.16	20.3~25.7
			1RB#99	24.00	20.3~25.7
			18RB#0	24.03	20.3~25.7

The Conducted Power Measurement Result for LTE Band					
Test Result for LTE Band 28					
Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
3MHz	Low Range	1	1RB#0	23.86	20.3~25.7
			4RB#0	23.81	20.3~25.7
	Mid Range	1	1RB#0	24.01	20.3~25.7
			4RB#0	23.87	20.3~25.7
	High Range	1	1RB#14	23.86	20.3~25.7
			4RB#11	23.89	20.3~25.7
5MHz	Low Range	1	1RB#0	23.74	20.3~25.7
			8RB#0	23.71	20.3~25.7
	Mid Range	1	1RB#0	23.81	20.3~25.7
			8RB#0	23.83	20.3~25.7
	High Range	1	1RB#24	23.85	20.3~25.7
			8RB#17	23.83	20.3~25.7
20MHz	Low Range	1	1RB#0	23.79	20.3~25.7
			18RB#0	23.70	20.3~25.7
	Mid Range	1	1RB#0	23.84	20.3~25.7
			18RB#0	23.85	20.3~25.7
	High Range	1	1RB#99	23.66	20.3~25.7
			18RB#82	23.58	20.3~25.7



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



The Conducted Power Measurement Result for LTE Band

Test Result for LTE Band 38

Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
5MHz	Low Range	1	1RB#0	21.69	20.3~25.7
			8RB#0	21.75	20.3~25.7
	Mid Range	1	1RB#0	22.15	20.3~25.7
			8RB#0	22.19	20.3~25.7
	High Range	1	1RB#24	21.38	20.3~25.7
			8RB#17	21.46	20.3~25.7
20MHz	Low Range	1	1RB#0	21.61	20.3~25.7
			18RB#0	21.66	20.3~25.7
	Mid Range	1	1RB#0	21.98	20.3~25.7
			18RB#0	22.02	20.3~25.7
	High Range	1	1RB#99	21.44	20.3~25.7
			18RB#82	21.43	20.3~25.7

The Conducted Power Measurement Result for LTE Band

Test Result for LTE Band 40

Channel Bandwidth	Channel	RB Allocation		Average Power (dBm, QPSK)	Limit (dBm)
		RB Size	RB Offset		
5MHz	Low Range	1	1RB#0	21.21	20.3~25.7
			8RB#0	21.33	20.3~25.7
	Mid Range	1	1RB#0	21.14	20.3~25.7
			8RB#0	21.07	20.3~25.7
	High Range	1	1RB#24	21.24	20.3~25.7
			8RB#17	21.22	20.3~25.7
20MHz	Low Range	1	1RB#0	21.04	20.3~25.7
			18RB#0	21.17	20.3~25.7
	Mid Range	1	1RB#0	21.51	20.3~25.7
			18RB#0	21.11	20.3~25.7
	High Range	1	1RB#99	20.95	20.3~25.7
			18RB#82	21.21	20.3~25.7





Annex of Radiated spurious emission

Radiated spurious emissions - MS allocated a channel(Worst Case)

LTE Band 1(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.54	Horizontal	-72.76	-36.00	Pass
852.57	H	-72.36	-36.00	
3902.19	H	-64.01	-30.00	
5852.66	H	-54.56	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.22	Vertical	-74.07	-36.00	Pass
946.86	V	-79.40	-36.00	
3905.97	V	-66.64	-30.00	
5855.41	V	-59.65	-30.00	

LTE Band 1(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.17	Horizontal	-71.76	-36.00	Pass
926.31	H	-77.32	-36.00	
3904.51	H	-64.09	-30.00	
5855.09	H	-59.63	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.56	Vertical	-78.29	-36.00	Pass
735.63	V	-75.22	-36.00	
3903.61	V	-69.45	-30.00	
5850.30	V	-60.96	-30.00	





LTE Band 1(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.09	Horizontal	-70.11	-36.00	Pass
860.47	H	-74.95	-36.00	
3903.51	H	-66.12	-30.00	
5855.42	H	-54.82	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.04	Vertical	-74.36	-36.00	Pass
904.38	V	-79.45	-36.00	
3905.10	V	-63.43	-30.00	
5853.69	V	-58.20	-30.00	

LTE Band 1(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.95	Horizontal	-73.56	-36.00	Pass
954.60	H	-72.09	-36.00	
3905.59	H	-64.77	-30.00	
5853.01	H	-59.44	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.80	Vertical	-72.37	-36.00	Pass
949.16	V	-77.14	-36.00	
3900.08	V	-67.42	-30.00	
5854.86	V	-51.84	-30.00	





LTE Band 3(1.4MHz, RB allocation=6): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.41	Horizontal	-74.84	-36.00	Pass
958.46	H	-79.48	-36.00	
3504.53	H	-70.87	-30.00	
5250.52	H	-52.98	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.41	Vertical	-80.60	-36.00	Pass
740.59	V	-76.92	-36.00	
3505.91	V	-67.76	-30.00	
5250.85	V	-53.30	-30.00	

LTE Band 3(1.4MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
57.07	Horizontal	-77.57	-36.00	Pass
933.79	H	-70.87	-36.00	
3504.46	H	-63.69	-30.00	
5250.59	H	-50.11	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.88	Vertical	-77.23	-36.00	Pass
993.22	V	-75.77	-36.00	
3504.59	V	-68.43	-30.00	
5254.74	V	-61.00	-30.00	





LTE Band 3(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.77	Horizontal	-79.09	-36.00	Pass
931.80	H	-71.41	-36.00	
3501.71	H	-61.22	-30.00	
5255.64	H	-51.81	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.78	Vertical	-71.22	-36.00	Pass
773.61	V	-78.19	-36.00	
3500.92	V	-69.78	-30.00	
5253.45	V	-59.46	-30.00	

LTE Band 3(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.83	Horizontal	-70.28	-36.00	Pass
949.66	H	-71.13	-36.00	
3500.44	H	-66.46	-30.00	
5252.34	H	-54.25	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.69	Vertical	-70.20	-36.00	Pass
726.05	V	-75.24	-36.00	
3504.34	V	-67.74	-30.00	
5253.32	V	-54.89	-30.00	





LTE Band 3(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.69	Horizontal	-72.04	-36.00	Pass
752.38	H	-70.38	-36.00	
3500.64	H	-62.57	-30.00	
5250.71	H	-51.27	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.20	Vertical	-73.33	-36.00	Pass
990.86	V	-79.68	-36.00	
3504.01	V	-66.69	-30.00	
5253.30	V	-55.21	-30.00	

LTE Band 3(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.33	Horizontal	-77.65	-36.00	Pass
915.41	H	-80.00	-36.00	
3502.67	H	-63.43	-30.00	
5252.55	H	-58.51	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.70	Vertical	-72.97	-36.00	Pass
864.12	V	-71.69	-36.00	
3503.78	V	-62.53	-30.00	
5251.12	V	-56.44	-30.00	





LTE Band 7(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.35	Horizontal	-78.75	-36.00	Pass
905.70	H	-74.72	-36.00	
5073.79	H	-62.12	-30.00	
7690.65	H	-56.22	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
59.35	Vertical	-80.38	-36.00	Pass
984.17	V	-75.85	-36.00	
5073.65	V	-60.02	-30.00	
7685.54	V	-54.44	-30.00	

LTE Band 7(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.22	Horizontal	-74.90	-36.00	Pass
898.74	H	-73.90	-36.00	
5071.74	H	-61.88	-30.00	
7687.26	H	-56.12	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.77	Vertical	-73.00	-36.00	Pass
714.20	V	-77.13	-36.00	
5072.10	V	-67.47	-30.00	
7690.99	V	-53.73	-30.00	





LTE Band 7(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.64	Horizontal	-76.85	-36.00	Pass
763.93	H	-80.79	-36.00	
5070.88	H	-67.01	-30.00	
7688.79	H	-58.71	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.04	Vertical	-78.57	-36.00	Pass
961.53	V	-78.17	-36.00	
5072.23	V	-70.33	-30.00	
7685.19	V	-55.37	-30.00	

LTE Band 7(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
57.97	Horizontal	-78.59	-36.00	Pass
859.69	H	-77.03	-36.00	
5075.70	H	-60.01	-30.00	
7687.55	H	-53.19	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.08	Vertical	-73.20	-36.00	Pass
918.87	V	-74.00	-36.00	
5072.38	V	-60.72	-30.00	
7687.77	V	-56.39	-30.00	





LTE Band 8(1.4MHz, RB allocation=6): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.90	Horizontal	-70.81	-36.00	Pass
746.92	H	-80.00	-36.00	
1794.37	H	-70.52	-30.00	
2690.17	H	-54.97	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
59.97	Vertical	-75.83	-36.00	Pass
723.65	V	-77.86	-36.00	
1790.34	V	-67.76	-30.00	
2692.72	V	-58.20	-30.00	

LTE Band 8(1.4MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.62	Horizontal	-73.07	-36.00	Pass
927.07	H	-79.72	-36.00	
1798.32	H	-64.18	-30.00	
2693.94	H	-58.58	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.60	Vertical	-77.08	-36.00	Pass
743.57	V	-78.62	-36.00	
1794.91	V	-61.27	-30.00	
2693.18	V	-58.18	-30.00	





LTE Band 8(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.88	Horizontal	-77.99	-36.00	Pass
822.18	H	-79.76	-36.00	
1796.54	H	-69.82	-30.00	
2695.14	H	-55.09	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.68	Vertical	-70.50	-36.00	Pass
957.44	V	-80.73	-36.00	
1800.62	V	-65.34	-30.00	
2691.65	V	-60.90	-30.00	

LTE Band 8(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.72	Horizontal	-72.45	-36.00	Pass
717.81	H	-71.83	-36.00	
1797.31	H	-65.61	-30.00	
2693.72	H	-51.58	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
50.00	Vertical	-71.56	-36.00	Pass
973.01	V	-80.79	-36.00	
1797.92	V	-68.13	-30.00	
2694.77	V	-53.81	-30.00	





LTE Band 8(10MHz, RB allocation=50): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.79	Horizontal	-77.45	-36.00	Pass
792.11	H	-76.33	-36.00	
1793.40	H	-69.43	-30.00	
2695.41	H	-56.42	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.11	Vertical	-72.07	-36.00	Pass
793.03	V	-80.13	-36.00	
1799.45	V	-61.10	-30.00	
2693.63	V	-60.95	-30.00	

LTE Band 8(10MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.26	Horizontal	-72.98	-36.00	Pass
864.55	H	-73.37	-36.00	
1800.34	H	-67.84	-30.00	
2692.99	H	-59.77	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.67	Vertical	-76.73	-36.00	Pass
792.20	V	-79.61	-36.00	
1800.72	V	-62.97	-30.00	
2694.69	V	-58.76	-30.00	





LTE Band 20(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.35	Horizontal	-73.10	-36.00	Pass
874.86	H	-80.69	-36.00	
1699.42	H	-61.34	-30.00	
2545.26	H	-50.34	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.92	Vertical	-76.20	-36.00	Pass
907.93	V	-77.10	-36.00	
1693.04	V	-70.47	-30.00	
2541.81	V	-58.99	-30.00	

LTE Band 20(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.70	Horizontal	-75.79	-36.00	Pass
735.06	H	-73.68	-36.00	
1698.48	H	-67.89	-30.00	
2545.26	H	-54.45	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.39	Vertical	-77.56	-36.00	Pass
915.81	V	-73.31	-36.00	
1700.89	V	-65.70	-30.00	
2543.26	V	-54.28	-30.00	





LTE Band 20(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.74	Horizontal	-76.30	-36.00	Pass
909.96	H	-73.30	-36.00	
1699.21	H	-60.28	-30.00	
2541.86	H	-59.31	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.08	Vertical	-80.66	-36.00	Pass
977.20	V	-80.29	-36.00	
1691.15	V	-64.93	-30.00	
2542.23	V	-51.14	-30.00	

LTE Band 20(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
59.28	Horizontal	-79.08	-36.00	Pass
735.09	H	-76.77	-36.00	
1694.44	H	-61.15	-30.00	
2542.83	H	-54.75	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.82	Vertical	-70.08	-36.00	Pass
811.42	V	-80.06	-36.00	
1699.14	V	-67.73	-30.00	
2543.44	V	-53.81	-30.00	





LTE Band 28(3MHz, RB allocation=15): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.41	Horizontal	-80.15	-36.00	Pass
725.62	H	-80.08	-36.00	
1454.96	H	-61.60	-30.00	
2175.16	H	-60.28	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
57.12	Vertical	-79.43	-36.00	Pass
995.96	V	-73.29	-36.00	
1452.64	V	-66.32	-30.00	
2173.41	V	-50.56	-30.00	

LTE Band 28(3MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.60	Horizontal	-79.91	-36.00	Pass
812.75	H	-70.69	-36.00	
1447.35	H	-65.58	-30.00	
2176.41	H	-53.68	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
59.97	Vertical	-77.48	-36.00	Pass
771.14	V	-73.92	-36.00	
1453.90	V	-67.96	-30.00	
2174.89	V	-51.24	-30.00	





LTE Band 28(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
57.27	Horizontal	-76.32	-36.00	Pass
892.94	H	-75.96	-36.00	
1449.63	H	-67.20	-30.00	
2175.09	H	-51.13	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.59	Vertical	-72.76	-36.00	Pass
935.89	V	-71.62	-36.00	
1452.47	V	-60.62	-30.00	
2170.35	V	-54.29	-30.00	

LTE Band 28(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
50.24	Horizontal	-71.69	-36.00	Pass
733.42	H	-72.38	-36.00	
1450.35	H	-67.98	-30.00	
2180.64	H	-56.55	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.59	Vertical	-76.55	-36.00	Pass
779.50	V	-76.73	-36.00	
1451.67	V	-64.79	-30.00	
2172.73	V	-59.69	-30.00	





LTE Band 28(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.04	Horizontal	-74.18	-36.00	Pass
702.26	H	-74.53	-36.00	
1455.29	H	-64.93	-30.00	
2173.49	H	-51.45	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.73	Vertical	-73.85	-36.00	Pass
864.25	V	-78.30	-36.00	
1452.48	V	-66.88	-30.00	
2179.32	V	-51.14	-30.00	

LTE Band 28(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.85	Horizontal	-73.25	-36.00	Pass
711.02	H	-71.96	-36.00	
1452.00	H	-64.75	-30.00	
2177.54	H	-52.26	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.92	Vertical	-75.58	-36.00	Pass
961.00	V	-72.71	-36.00	
1454.80	V	-66.73	-30.00	
2171.75	V	-57.99	-30.00	



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



LTE Band 38(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
50.25	Horizontal	-78.40	-36.00	Pass
935.98	H	-75.69	-36.00	
5193.14	H	-60.86	-30.00	
7793.43	H	-56.51	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.09	Vertical	-75.65	-36.00	Pass
999.48	V	-74.51	-36.00	
5190.33	V	-60.87	-30.00	
7792.89	V	-59.98	-30.00	

LTE Band 38(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
51.67	Horizontal	-77.59	-36.00	Pass
841.49	H	-72.80	-36.00	
5191.09	H	-69.83	-30.00	
7790.75	H	-56.33	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
56.99	Vertical	-77.69	-36.00	Pass
714.10	V	-72.14	-36.00	
5190.51	V	-66.22	-30.00	
7790.24	V	-57.01	-30.00	





LTE Band 38(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
60.68	Horizontal	-74.46	-36.00	Pass
732.03	H	-71.98	-36.00	
5190.72	H	-64.57	-30.00	
7794.10	H	-52.98	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.85	Vertical	-76.89	-36.00	Pass
858.39	V	-73.83	-36.00	
5194.54	V	-65.93	-30.00	
7790.63	V	-57.01	-30.00	

LTE Band 38(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.69	Horizontal	-74.22	-36.00	Pass
707.11	H	-72.06	-36.00	
5192.02	H	-64.79	-30.00	
7791.48	H	-57.89	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
53.40	Vertical	-75.13	-36.00	Pass
812.06	V	-72.56	-36.00	
5191.36	V	-66.15	-30.00	
7794.79	V	-56.52	-30.00	





LTE Band 40(5MHz, RB allocation=25): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.63	Horizontal	-78.95	-36.00	Pass
831.70	H	-76.54	-36.00	
4700.67	H	-62.04	-30.00	
7055.34	H	-59.45	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.66	Vertical	-70.45	-36.00	Pass
921.80	V	-75.43	-36.00	
4703.66	V	-69.37	-30.00	
7054.10	V	-51.37	-30.00	

LTE Band 40(5MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
54.81	Horizontal	-74.09	-36.00	Pass
976.72	H	-76.29	-36.00	
4705.51	H	-66.82	-30.00	
7058.26	H	-58.32	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
59.26	Vertical	-80.01	-36.00	Pass
977.87	V	-78.90	-36.00	
4705.24	V	-66.13	-30.00	
7055.46	V	-59.95	-30.00	



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



LTE Band 40(20MHz, RB allocation=100): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.12	Horizontal	-72.53	-36.00	Pass
989.81	H	-80.49	-36.00	
4705.88	H	-70.40	-30.00	
7050.91	H	-52.60	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
52.93	Vertical	-75.34	-36.00	Pass
819.51	V	-79.86	-36.00	
4701.39	V	-67.48	-30.00	
7053.07	V	-50.27	-30.00	

LTE Band 40(20MHz, RB allocation=1): Middle Channel, Normal condition				
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
55.11	Horizontal	-75.25	-36.00	Pass
876.76	H	-74.43	-36.00	
4705.27	H	-68.17	-30.00	
7054.20	H	-53.20	-30.00	
Frequency (MHz)	Radiated Spurious Emission		Limit (dBm)	Test Result
	Polarization	Level(dBm)		
58.78	Vertical	-80.78	-36.00	Pass
742.85	V	-71.31	-36.00	
4705.29	V	-63.22	-30.00	
7054.64	V	-58.18	-30.00	

-----THE END OF REPORT-----

