



## 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

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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



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<b>RADIO TEST REPORT</b> <b>ETSI EN 303 413 V1.2.1 (2021-04)</b> Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard for access to radio spectrum	
<b>Report Reference No.</b>	: <b>LCSA03214077EL</b>
<b>Date of Issue</b>	: May 10, 2024
<b>Testing Laboratory Name</b>	: <b>Shenzhen LCS Compliance Testing Laboratory Ltd.</b>
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<b>Testing Location/ Procedure....</b>	: Full application of Harmonised standards <input checked="" type="checkbox"/> Partial application of Harmonised standards <input type="checkbox"/> Other standard testing method <input type="checkbox"/>
<b>Applicant's Name.....</b>	: <b>Shenzhen Huafurui Technology Co., Ltd.</b>
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<b>Test Specification</b>	
<b>Standard.....</b>	: ETSI EN 303 413 V1.2.1 (2021-04)
<b>Test Report Form No. ....</b>	: LCSEMC-1.0
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<b>Test Item Description.....</b>	: <b>Smartphone</b>
<b>Trade Mark.....</b>	: CUBOT
<b>Test Model.....</b>	: KINGKONG X
<b>Ratings .....</b>	: Please Refer to Page 6
<b>Result .....</b>	: <b>Positive</b>

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## RADIO -- TEST REPORT

**Test Report No. : LCSA03214077EL**May 10, 2024  
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..... : /

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**Manufacturer..... : Shenzhen Huafurui Technology Co., Ltd.**

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Telephone..... : /

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**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.



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Revision History

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



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## 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)



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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



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-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



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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. Objective

This Type approval report is prepared on behalf of **Shenzhen Huafurui Technology Co., Ltd.** in accordance with ETSI EN 303 413 V1.2.1 (2021-04), Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard for access to radio spectrum.

The objective is to determine compliance with ETSI EN 303 413 V1.2.1 (2021-04).

## 1.3. Related Submittal(s)/Grant(s)

No Related Submittals.

## 1.4. Test Methodology

All measurements contained in this report were conducted with ETSI EN 303 413 V1.2.1 (2021-04).

## 1.5. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

## 1.6. 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

## 1.7. 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





## 1.8. Measurement Uncertainty

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	0.01ppm	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2°C	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

## 9. Description Of Test Modes

The EUT has been tested under operating condition.

Mode 1: GPS Receiver

Mode 2: GLONASS Receiver

Mode 3: Galileo Receiver

Mode 4: BDS Receiver

This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in Y position.





## 2. SYSTEM TEST CONFIGURATION

### 2.1. Justification

The system was configured for testing in engineering mode.

### 2.2. EUT Exercise Software

N/A.

### 2.3. Special Accessories

N/A.

### 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. Configuration of Test Setup

Please refer to the test setup photo.





### 3. SUMMARY OF TEST RESULTS

RULES ETSI EN 303 413 V1.2.1 (2021-04)	DESCRIPTION OF TEST	RESULT
§ 4.2.1	Receiver blocking	Compliant
§ 4.2.2	Receiver spurious emissions	Compliant

Note: "N/A" means this test item is not applicable.





## 4. TEST RESULTS

### 4.1. Receiver blocking

#### 4.1.1 Definition and Limit

Receiver blocking is a measure of the capability of the GUE to receive a wanted signal without exceeding a given degradation due to the presence of an unwanted input signal operating in accordance with the allocation table of the ITU Radio Regulations [i.13] in frequency bands adjacent or near-adjacent to the relevant RNSS band.

The  $C/N_0$  metric reported by the GUE for all GNSS constellations and GNSS signals given in table 4-1 and supported by the GUE shall not degrade by more than the value given in equation (4-1) when a blocking signal is applied. The blocking signal is defined in table 4-4, with the frequencies and power levels defined in table 4-2 and/or in table 4-3 depending on the RNSS bands supported by the GUE

Equation 4-1: Maximum degradation in  $C/N_0$

$$\Delta C/N_0 \leq 1 \text{ dB} \quad (4-1)$$

**Table 4-2: Frequency bands, blocking signal test point centre frequencies and power levels for the 1 559 MHz to 1 610 MHz RNSS band**

Frequency band (MHz)	Test point centre frequency (MHz)	Blocking signal power level (dBm)	Comments
1518 to 1525	1524	-65	MSS (space-to-Earth) band
1525 to 1549	1548	-95	MSS (space-to-Earth) band
1549 to 1559	1554	-105	MSS (space-to-Earth) band
1559 to 1610	GUE RNSS band under test		
1610 to 1626	1615	-105	MSS (space-to-Earth) band
1626 to 1640	1627	-85	MSS (space-to-Earth) band

**Table 4-3: Frequency bands, blocking signal test point centre frequencies and power levels for the 1 164 MHz to 1 300 MHz RNSS band**

Frequency band (MHz)	Test point centre frequency (MHz)	Blocking signal power level (dBm)	Comments
960 to 1164	1154	-75	AM(R)S, ARNS band
1164 to 1215	GUE RNSS band under test		
1215 to 1260	GUE RNSS band under test		
1260 to 1300	GUE RNSS band under test		
1300 to 1350	1310	-85	Radiolocation, ARNS, RNSS (Earth-to-space) band

**Table 4-4: Blocking signal**

Parameter	Value	Comments
Frequency	See table 4-2 and table 4-3	
Power level	See table 4-2 and table 4-3	
Bandwidth	1 MHz	See clause B.1 for details
Format	AWGN	



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#### 4.1.2 Test Procedure

- 1) Configure the GNSS signal generator to simulate the GNSS constellations and GNSS signals from table 4-1 declared as supported by the GUE, with power levels and other details as specified in clause B.2.
- 2) With the blocking signal switched off, the EUT shall be given sufficient time to acquire all simulated satellites from the declared GNSS constellations.
- 3) Record the  $C/N_0$  value(s) reported by the EUT under the condition in step 2). Sufficient filtering shall be used to obtain stable value(s).  $C/N_0$  may be averaged over time and across all the simulated satellites for a particular GNSS constellation and GNSS signal. However,  $C/N_0$  shall not be averaged across different satellite signals in the same GNSS constellation or across different GNSS constellations. For a multi-GNSS constellation and/or multi-GNSS signal EUT, there shall be a separate  $C/N_0$  value recorded for each GNSS constellation and each GNSS signal supported.
- 4) The blocking signal generator shall be configured to generate the signal defined in table 4-4, at the first test point centre frequency and signal power level as specified in table 4-2.
- 5) The blocking signal shall be switched on, and the EUT's  $C/N_0$  value(s) recorded as in step 3). The difference(s) between this value(s) and the value(s) recorded in step 3) is the  $C/N_0$  degradation caused by the blocking signal for this test point.
- 6) Test point Pass/Fail Criteria: If the  $C/N_0$  degradation from step 5) does not exceed the value in equation (4-1), then this test point is set to "pass". If the  $C/N_0$  degradation exceeds the value in equation (4-1), then this test point is set to "fail". For a multi-GNSS constellation and/or multi-GNSS signal EUT, there shall be a separate pass/fail determination for each GNSS constellation and for each GNSS signal supported. If the  $C/N_0$  degradation exceeds the value in equation (4-1) for any supported GNSS constellation or supported GNSS signal, then this test point is set to "fail".
- 7) Step 1) through step 6) shall be repeated for all test point centre frequencies (and associated signal power level) specified in table 4-2.

#### 4.1.3 Test Result

##### Environmental Conditions

Temperature/ Humidity:	23.6°C/ 52.8%	ATM Pressure:	100.9 kPa
Operator:	Paddi Chen	Conclusion:	Pass

##### GPS Receiver

Frequency Band(MHz)	Test Point Center Frequency(MHz)	Blocking signal power level (dBm)	Test Result(dB)	Limit(dB) ( $\Delta C/N_0$ )
1518 to 1525	1524	-65	0.30	$\leq 1$
1525 to 1549	1548	-95	0.44	$\leq 1$
1 549 to 1 559	1554	-105	0.69	$\leq 1$
1 610 to 1 626	1615	-105	0.54	$\leq 1$
1 626 to 1 640	1627	-85	0.26	$\leq 1$



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## GLONASS Receiver

Frequency Band(MHz)	Test Point Center Frequency(MHz)	Blocking signal power level (dBm)	Test Result(dB)	Limit(dB) ( $\Delta C/N_0$ )
1518 to 1525	1524	-65	0.38	$\leq 1$
1525 to 1549	1548	-95	0.30	$\leq 1$
1 549 to 1 559	1554	-105	0.69	$\leq 1$
1 610 to 1 626	1615	-105	0.73	$\leq 1$
1 626 to 1 640	1627	-85	0.50	$\leq 1$

## Galileo Receiver

Frequency Band(MHz)	Test Point Center Frequency(MHz)	Blocking signal power level (dBm)	Test Result(dB)	Limit(dB) ( $\Delta C/N_0$ )
1518 to 1525	1524	-65	0.27	$\leq 1$
1525 to 1549	1548	-95	0.48	$\leq 1$
1 549 to 1 559	1554	-105	0.63	$\leq 1$
1 610 to 1 626	1615	-105	0.59	$\leq 1$
1 626 to 1 640	1627	-85	0.33	$\leq 1$

## BDS Receiver

Frequency Band(MHz)	Test Point Center Frequency(MHz)	Blocking signal power level (dBm)	Test Result(dB)	Limit(dB) ( $\Delta C/N_0$ )
1518 to 1525	1524	-65	0.39	$\leq 1$
1525 to 1549	1548	-95	0.30	$\leq 1$
1 549 to 1 559	1554	-105	0.55	$\leq 1$
1 610 to 1 626	1615	-105	0.49	$\leq 1$
1 626 to 1 640	1627	-85	0.60	$\leq 1$





## 4.2. Receiver Spurious Emissions

### 4.2.1 Definition and Limit

Receiver spurious emissions are emissions at any frequency when the GUE is active.

Frequency range	Maximum power	Bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 8,3 GHz	-47 dBm	1 MHz

### 4.2.2 Test Procedure

Please refer to ETSI EN 303 413 V1.2.1 (2021-04) clause 5.5.3 for measurement method.

### 4.2.3 Test Result

#### Environmental Conditions

Temperature/ Humidity:	23.6°C / 52.8%	ATM Pressure:	100.9 kPa
Test Mode:	Mode 1-1575.42MHz	Operator:	Paddi Chen

#### Test Result For Receiving Mode(Detecting Frequency Range: 30MHz~1GHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
67.03	-68.89	-57.00	-11.89	V
911.44	-70.27	-57.00	-13.27	V
165.08	-73.19	-57.00	-16.19	H
928.00	-73.30	-57.00	-16.30	H

#### Test Result For Receiving Mode(Detecting Frequency Range: Above 1GHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
1713.77	-68.35	-47.00	-21.35	V
3562.69	-56.84	-47.00	-9.84	H
2020.14	-71.68	-47.00	-24.68	H
3565.81	-59.66	-47.00	-12.66	V



**Environmental Conditions**

Temperature/ Humidity:	23.6°C / 52.8%	ATM Pressure:	100.9 kPa
Test Mode:	Mode 2-1602.5625MHz	Operator:	Paddi Chen

**Test Result For Receiving Mode(Detecting Frequency Range: 30MHz~1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
66.34	-67.32	-57.00	-10.32	V
912.13	-68.93	-57.00	-11.93	V
165.03	-72.42	-57.00	-15.42	H
926.62	-74.03	-57.00	-17.03	H

**Test Result For Receiving Mode(Detecting Frequency Range: Above 1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
1715.79	-69.01	-47.00	-22.01	V
3565.74	-56.07	-47.00	-9.07	H
2017.38	-73.89	-47.00	-26.89	H
3567.71	-61.49	-47.00	-14.49	V

**Environmental Conditions**

Temperature/ Humidity:	23.6°C / 52.8%	ATM Pressure:	100.9 kPa
Test Mode:	Mode 3-1589.74MHz	Operator:	Paddi Chen

**Test Result For Receiving Mode(Detecting Frequency Range: 30MHz~1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
65.27	-69.26	-57.00	-12.26	V
911.04	-69.19	-57.00	-12.19	V
163.63	-75.13	-57.00	-18.13	H
925.63	-74.16	-57.00	-17.16	H

**Test Result For Receiving Mode(Detecting Frequency Range: Above 1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
1713.98	-71.63	-47.00	-24.63	V
3563.12	-54.43	-47.00	-7.43	H
2019.21	-73.15	-47.00	-26.15	H
3567.68	-62.11	-47.00	-15.11	V



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Scan code to check authenticity

**Environmental Conditions**

Temperature/ Humidity:	23.6°C / 52.8%	ATM Pressure:	100.9 kPa
Test Mode:	Mode 4-1561.098MHz	Operator:	Paddi Chen

**Test Result For Receiving Mode(Detecting Frequency Range: 30MHz~1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
66.18	-66.17	-57.00	-9.17	V
911.89	-68.67	-57.00	-11.67	V
164.63	-72.85	-57.00	-15.85	H
925.87	-75.54	-57.00	-18.54	H

**Test Result For Receiving Mode(Detecting Frequency Range: Above 1GHz)**

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Polarity (H/V)
1712.28	-68.87	-47.00	-21.87	V
3564.15	-56.08	-47.00	-9.08	H
2018.66	-73.43	-47.00	-26.43	H
3568.27	-61.08	-47.00	-14.08	V

**Notes:**

1. Measuring frequencies from 25MHz~10th harmonic or 26.5GHz (which is less)
2. The emissions that at least 20dB below the official limit are not reported.





## 5. LIST OF MEASURING EQUIPMENT

Item	Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	MXA Signal Analyzer	Agilent	N9020A	MY51250905	2023-10-18	2024-10-17
2	WIDEBAND RADIO COMMUNICATION TESTER	R&S	CMW 500	103818	2023-06-09	2024-06-08
3	MXG Vector Signal Generator	Agilent	N5182A	MY47071151	2023-06-09	2024-06-08
4	Combiner	N/A	N/A	SHWLCB2-52500S	2023-10-18	2024-10-17
5	EMI Test Software	Farad	EZ	/	N/A	N/A
6	3m Full Anechoic Chamber	MRDIANZI	FAC-3M	MR009	2022-08-17	2025-08-16
7	Positioning Controller	Max-Full	MF7802BS	MF780208586	N/A	N/A
8	By-log Antenna	SCHWARZBECK	VULB9163	9163-470	2021-09-12	2024-09-11
9	Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1925	2021-09-05	2024-09-04
10	EMI Test Receiver	R&S	ESR 7	101181	2023-08-15	2024-08-14
11	RS SPECTRUM ANALYZER	R&S	FSP40	100503	2023-07-17	2024-07-16
12	Low-frequency amplifier	SchwarzZBECK	BBV9745	00253	2023-10-18	2024-10-17
13	High-frequency amplifier	JS Denki Pte	PA0118-43	JSPA21009	2023-10-18	2024-10-17







## 6. PHOTOGRAPHS OF TEST SETUP

Please refer to separated files Appendix D for Photographs of Test Setup\_RF.

## 7. PHOTOGRAPHS OF THE EUT

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

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

