



# TEST REPORT

## No. I22Z60151-EMC11

for

**Honor Device Co., Ltd.**

**Smart Phone**

**Model Name: LGE-NX9**

With

**FCC ID: 2AYGCLGE-NX9**

**Hardware Version: HN1LGEHM**

**Software Version: 6.0.0.108(C900E103R1P3)**

**Issued Date: 2022-04-20**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

**Test Laboratory:**

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## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I22Z60151-EMC11	Rev.0	1 <sup>st</sup> edition	2022-04-20

Note: the latest revision of the test report supersedes all previous version.

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## 1. Test Laboratory

### 1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2005 accredited test laboratory under NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP) with lab code 600118-0 and is also an FCC accredited test laboratory (CN5017), and ISED accredited test laboratory (CN0066). The detail accreditation scope can be found on NVLAP website.

### 1.2. Testing Location

CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area,  
Beijing, P. R. China 100176

### 1.3. Testing Environment

Normal Temperature: 15-35°C  
Relative Humidity: 20-75%

### 1.4. Project Data

Testing Start Date: 2022-02-01  
Testing End Date: 2022-03-29

### 1.5. Signature



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An Hui

(Prepared this test report)



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Zhang Ying

(Reviewed this test report)



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Zhang Xia

(Approved this test  
report)



## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Honor Device Co., Ltd.  
Address /Post: Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China  
Contact /  
Email: /  
Telephone: /

### **2.2. Manufacturer Information**

Company Name: Honor Device Co., Ltd.  
Address /Post: Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China  
Contact /  
Email: /  
Telephone: /

### **3. Equipment Under Test (EUT) and Ancillary Equipment (AE)**

#### **3.1. About EUT**

Description	Smart Phone
Model Name	LGE-NX9
FCC ID	2AYGCLGE-NX9

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL.

#### **3.2. Internal Identification of EUT used during the test**

EUT1	867843050022982/867843050024483	HN1LGEHM	6.0.0.108(C900E103R1P3)
EUT2	867843050057012/867843050058119	HN1LGEHM	6.0.0.108(C900E103R1P3)

\*EUT ID: is used to identify the test sample in the lab internally.

#### **3.3. Internal Identification of AE used during the test**

<b>AE ID*</b>	<b>Description</b>	<b>SN</b>	<b>Note</b>
AE1-1	Adapter	0221945	HN-200500E01
AE1-2	Adapter	02221944	HN-200500B01
AE1-3	Adapter	02221943	HN-200500U01
AE2-1	USB Cable	04072296	L125UC008-CS-H
AE2-2	USB Cable	04072296	AU2-CRO015HF
AE2-3	USB Cable	04072296	RY0001
AE3-1	Headset	22040347	1331-3301-6001-TC-347
AE4-1	Battery	2402AAAD	HB586680EFW
AE4-2	Battery	2402AAAD	HB586680EFW
AE5-1	Wireless Charging	99059XEN	Power-W06

\*AE ID: is used to identify the test sample in the lab internally.

#### **3.4. General Description**

Test combination

<b>EUT set-up No.</b>	<b>Combination of EUT and AE</b>	<b>Remarks</b>
Set.2-1	EUT1+ AE1-3+ AE2-1	EUT1
Set.2-2	EUT2+ AE1-3+ AE2-2/AE2-3	EUT2

## 4. Reference Documents

### 4.1. Documents supplied by applicant

EUT parameters, referring to Annex A for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

### 4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

<b>Reference</b>	<b>Title</b>	<b>Version</b>
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-20 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-20 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-20 Edition
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01

## 5. Laboratory Environment

**Semi-anechoic chamber** (22.6 meters X 13.6 meters X 11.0 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz - 1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 M
Ground system resistance	< 4 Ω
Site voltage standing-wave ratio ( $S_{VSWR}$ )	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 4000 MHz



## 6. Summary Of Test Result

### 5G NR n2

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/24.238	P

### 5G NR n5

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/22.917	P

### 5G NR n7

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/27.53	P

### 5G NR n38

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/27.53	P

### 5G NR n41

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/27.53	P

### 5G NR n66

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/27.53	P

### 5G NR n71

Items	Test Name	Clause in FCC rules	Verdict
1	Emission Limit	2.1051/27.53	P

#### Terms used in Verdict column

P	Pass. The EUT complies with the essential requirements in the standard.
NP	Not Performed. The test was not performed by CTTL.
NA	Not Applicable. The test was not applicable.
BR	Re-use test data from basic model report.
F	Fail. The EUT does not comply with the essential requirements in the standard.

#### Explanation of worst-case configuration

NR modulation: DFT-s-OFDM pi/2 BPSK; QPSK; 16QAM; 64QAM; 256QAM

CP-OFDM QPSK; 16QAM; 64QAM; 256QAM

NR BW: 5/10/20MHz/100MHz

The test results provided in this report represent the worst case configuration.

## 7. Test Equipment Utilized

Description	Type	Series Number	Manufacture	Cal Due Date	Calibration Interval
Universal Radio Communication Tester	MT8821C	6262257899	Anritsu	2022-05-06	1 year
Universal Radio Communication Tester	MT8000A	6262261933	Anritsu	2022-05-06	1 year
Spectrum Analyzer	FSV40	101047	R&S	2022-06-02	1 year
Spectrum Analyzer	FSV30	10301525	R&S	2022-06-02	1 year
Semi-anechoic chamber	FACT10-3.0	/	ETS	2024-03-25	3 years
EMI Antenna	VULB9163	9163-235	Schwarzbeck	2022-04-07	1 year
EMI Antenna	3115	6914	ETS-Lindgren	2023-01-19	1 year
EMI Antenna	3116	2663	ETS-Lindgren	2022-08-10	1 year
EMI Antenna	3117	00058889	ETS-Lindgren	2022-11-07	1 year
H-field Antenna	HFH2-Z2	829324/007	R&S	2022-12-23	1 year
Signal Generator	N5183A	MY49060052	Agilent	2022-07-11	1 year

## Annex A: Measurement Results-Emission Limit

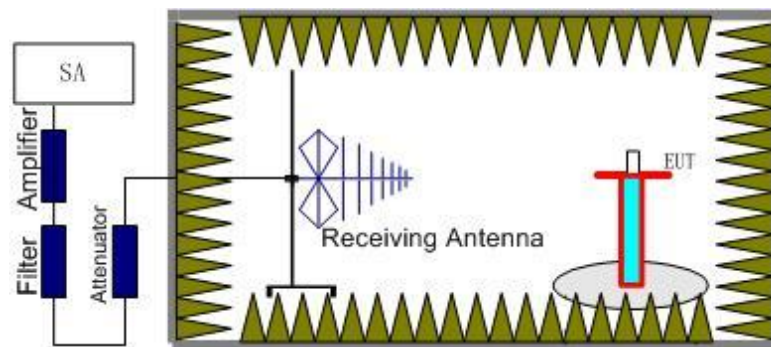
### A.1 Measurement Method

The measurements procedures in TIA-603E-2016 are used. This measurement is carried out in fully anechoic chamber FAC-3.

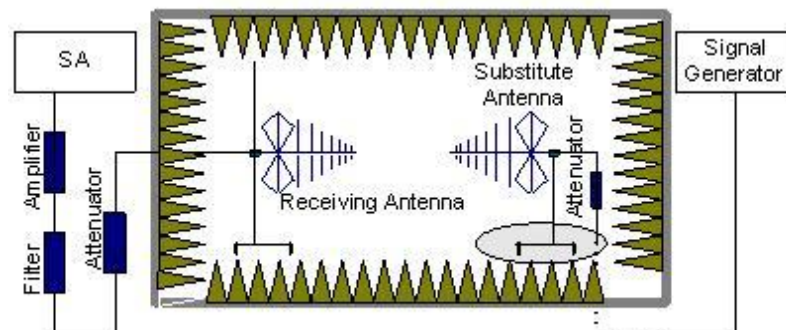
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each 5G NR Band.

#### The procedure of radiated spurious emissions is as follows:

1. EUT was placed on a 1.5-meter-high non-conductive stand at a 3-meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.5m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360 and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as ( $P_r$ ).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the

substitution antenna. Adjust the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss ( $P_{pl}$ ) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain ( $G_a$ ) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss ( $P_{pl}$ ) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} + P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15\text{dB}$ .

## A.2 Measurement Limit

Part 24.238 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log(P)$  dB.

Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log(P)$  dB.

Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log(P)$  dB.

Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log(P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that  $43 + 10 \log(P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log(P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power ( $P$ ) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 90.691 states that out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent

licensees. The emission limits are as follows: 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  $116\text{Log}_{10}(f/6.1)$  decibels or  $50 + 10 \text{Log}_{10}(P)$  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  $43 + 10\text{Log}_{10}(P)$  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.

Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

### A.3 Sweep Table

Working Frequency	Subrange (GHz)	RBW	VBW
DC_4A_n2, DC_7A_n2 DC_7A_n5, DC_5A_n7, DC_66A_n7, DC_5A_n38, DC_12A_n38, DC_5A_n41, DC_26A_n41, DC_7A_n66,	0.0000009-0.000015	0.2kHz	0.6kHz
5G NR SA n2	0.000015-0.03	9kHz	27kHz
5G NR SA n5, 5G NR SA n7, 5G NR SA n38,	0.03~1	100kHz	300kHz
5G NR SA n41, 5G NR SA n66, 5G NR SA n71	1-40	1 MHz	3 MHz

### A.4 Measurement Results

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each 5G NR Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each 5G NR Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

All mode of operation were investigated and the worst case configuration results are reported in this section.

The range of evaluated frequency is from 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz(chose the lower). Measurement value show only up to 6 maximum emissions noted.

Test combination  
5G NR NSA

EN-DC BAND	ANT NO.		Result
	LTE ANT NO.	5G NR ANT NO.	
DC_4A_n2A	ANT 4, ANT 6	ANT 1, ANT 2	Pass
DC_7A_n2A	ANT 4, ANT 9	ANT 1, ANT 2	Pass
DC_7A_n5A	ANT 4, ANT 9, ANT 1, ANT 2	ANT 0, ANT 3	Pass
DC_5A_n7A	ANT 0, ANT 3	ANT 4, ANT 9, ANT 1, ANT 2	Pass
DC_66A_n7A	ANT 1, ANT 2	ANT 4, ANT 9	Pass
DC_5A_n38A	ANT 0, ANT 3	ANT 4, ANT 9, ANT 1, ANT 2	Pass
DC_12A_n38A	ANT 0, ANT 3	ANT 4, ANT 9, ANT 1, ANT 2	Pass
DC_5A_n41A	ANT 0, ANT 3	ANT 4, ANT 9, ANT 1, ANT 2	Pass
DC_26A_n41A	ANT 0, ANT 3	ANT 4, ANT 9, ANT 1, ANT 2	Pass
DC_7A_n66A	ANT 4, ANT 9	ANT 1, ANT 2	Pass

\*For the test results,the combination in the above table had been tested.But only the worst cases were shown in test report.

Test combination  
5G NR SA

5G NR Band	ANT NO.	Result
n2	ANT 1, ANT 2	Pass
n5	ANT 0, ANT 3	Pass
n7	ANT 1, ANT 2, ANT 4, ANT 9	Pass
n38	ANT 4, ANT 9, ANT 1, ANT 2	Pass
n41	ANT 4, ANT 9, ANT 1, ANT 2	Pass
n66	ANT1, ANT 2	Pass
n71	ANT 0, ANT 3	Pass

\*For the test results,the combination in the above table had been tested.But only the worst cases were shown in test report.

**Set.2-1, ANT2**
**5G NR SA n2, 20MHz, QPSK, Channel 372000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3737.01	-57.35	6.33	8.53	-55.15	-13.00	42.15	V
5550.01	-55.73	7.18	10.59	-52.32	-13.00	39.32	V
7452.01	-52.19	8.26	12.14	-48.31	-13.00	35.31	V
9286.01	-50.85	9.12	13.27	-46.70	-13.00	33.70	V
11181.00	-48.94	9.48	13.16	-45.26	-13.00	32.26	H
13008.00	-46.96	10.50	13.51	-43.95	-13.00	30.95	H

**5G NR SA n2, 20MHz, QPSK, Channel 376000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3760.01	-57.62	6.26	8.56	-55.32	-13.00	42.32	H
5610.01	-54.70	7.25	10.58	-51.37	-13.00	38.37	V
7492.01	-52.31	8.37	12.19	-48.49	-13.00	35.49	H
9424.01	-51.61	9.16	13.35	-47.42	-13.00	34.42	H
11268.00	-48.39	9.80	13.15	-45.04	-13.00	32.04	H
13146.00	-45.85	10.73	13.70	-42.88	-13.00	29.88	H

**5G NR SA n2, 20MHz, QPSK, Channel 380000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3785.01	-58.23	6.18	8.60	-55.81	-13.00	42.81	H
5689.01	-55.43	7.29	10.56	-52.16	-13.00	39.16	V
7583.01	-53.00	8.04	12.27	-48.77	-13.00	35.77	V
9504.01	-52.27	9.53	13.40	-48.40	-13.00	35.40	V
11406.00	-46.91	10.05	13.12	-43.84	-13.00	30.84	V
17172.00	-37.67	12.44	14.18	-35.93	-25.00	10.93	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT3**
**5G NR SA n5, 20MHz, QPSK, Channel166800**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1648.51	-53.64	3.56	5.23	2.15	-54.12	-13.00	41.12	H
2469.50	-43.11	4.59	6.01	2.15	-43.84	-13.00	30.84	V
3291.82	-60.20	5.29	7.70	2.15	-59.94	-13.00	46.94	V
4137.29	-56.81	6.06	9.04	2.15	-55.98	-13.00	42.98	V
4964.64	-57.13	6.66	9.86	2.15	-56.08	-13.00	43.08	V
5800.35	-56.97	7.19	10.54	2.15	-55.77	-13.00	42.77	V

**5G NR SA n5, 20MHz, QPSK, Channel67300**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1667.51	-55.44	3.58	5.20	2.15	-55.97	-13.00	42.97	H
2518.50	-46.53	4.64	6.13	2.15	-47.19	-13.00	34.19	H
3336.39	-59.93	5.31	7.81	2.15	-59.58	-13.00	46.58	V
4190.91	-58.16	6.19	9.09	2.15	-57.41	-13.00	44.41	H
5025.93	-57.49	6.56	9.94	2.15	-56.26	-13.00	43.26	H
5849.10	-56.60	7.23	10.53	2.15	-55.45	-13.00	42.45	H

**5G NR SA n5, 20MHz, QPSK, Channel67800**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1686.51	-54.44	3.59	5.16	2.15	-55.02	-13.00	42.02	V
2533.00	-45.53	4.66	6.16	2.15	-46.18	-13.00	33.18	H
3377.48	-59.92	5.34	7.91	2.15	-59.50	-13.00	46.50	V
4243.84	-58.49	6.25	9.14	2.15	-57.75	-13.00	44.75	H
5084.43	-55.88	6.73	10.02	2.15	-54.74	-13.00	41.74	V
5927.80	-55.81	7.47	10.51	2.15	-54.92	-13.00	41.92	H

Note:The measurement results showed here are worst cases.



**Set.2-1, ANT2**
**5G NR SA n7, 20MHz, QPSK, Channel 502000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5029.01	-59.52	6.57	9.94	-56.15	-25.00	31.15	H
7508.01	-53.63	8.36	12.21	-49.78	-25.00	24.78	H
10064.01	-52.36	9.36	12.93	-48.79	-25.00	23.79	H
12548.00	-47.79	10.31	13.23	-44.87	-25.00	19.87	H
15075.00	-43.41	11.32	13.95	-40.78	-25.00	15.78	H
17541.00	-40.10	12.88	14.96	-38.02	-25.00	13.02	H

**5G NR SA n7, 20MHz, QPSK, Channel 507000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5052.01	-59.00	6.64	9.97	-55.67	-25.00	30.67	H
7588.01	-53.91	8.02	12.27	-49.66	-25.00	24.66	V
10128.01	-52.64	9.42	12.95	-49.11	-25.00	24.11	H
12664.00	-47.41	10.36	13.30	-44.47	-25.00	19.47	H
15215.00	-43.77	11.38	13.87	-41.28	-25.00	16.28	H
17738.00	-41.04	12.39	15.23	-38.20	-25.00	13.20	V

**5G NR SA n7, 20MHz, QPSK, Channel 512000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5134.01	-57.22	6.86	10.09	-53.99	-25.00	28.99	H
7660.01	-55.66	8.25	12.33	-51.58	-25.00	26.58	H
10232.01	-52.47	9.41	12.99	-48.89	-25.00	23.89	H
12822.00	-46.94	10.71	13.39	-44.26	-25.00	19.26	H
15360.00	-42.71	11.35	13.78	-40.28	-25.00	15.28	H
17908.00	-39.06	12.88	15.47	-36.47	-25.00	11.47	V

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT9**
**5G NR SA n38, 10MHz, QPSK, Channel 516000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6462.01	-52.68	7.54	10.96	-49.26	-25.00	24.26	V
9049.01	-50.78	9.07	13.13	-46.72	-25.00	21.72	V
11664.00	-47.67	9.68	13.07	-44.28	-25.00	19.28	V
14285.00	-44.08	10.96	14.44	-40.60	-25.00	15.60	V
15530.00	-42.53	11.52	13.70	-40.35	-25.00	15.35	H
16869.00	-37.38	12.03	13.75	-35.66	-25.00	10.66	H

**5G NR SA n38, 10MHz, QPSK, Channel 519000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6501.01	-52.96	7.52	11.00	-49.48	-25.00	24.48	H
9051.01	-50.27	9.07	13.13	-46.21	-25.00	21.21	H
11695.00	-47.41	9.62	13.06	-43.97	-25.00	18.97	H
14235.00	-44.16	10.91	14.45	-40.62	-25.00	15.62	V
15549.00	-41.73	11.51	13.70	-39.54	-25.00	14.54	V
16872.00	-38.07	12.03	13.75	-36.35	-25.00	11.35	H

**5G NR SA n38 10MHz, QPSK, Channel 522000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6455.01	-53.02	7.55	10.96	-49.61	-25.00	24.61	V
9048.01	-51.10	9.07	13.13	-47.04	-25.00	22.04	V
11649.00	-47.86	9.71	13.07	-44.50	-25.00	19.50	H
14256.00	-44.99	10.93	14.45	-41.47	-25.00	16.47	H
15531.00	-42.36	11.52	13.70	-40.18	-25.00	15.18	V
16842.00	-37.80	12.07	13.74	-36.13	-25.00	11.13	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT9**
**5G NR SA n41, 100MHz, QPSK, Channel 509202**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5078.01	-56.31	6.71	10.01	-53.01	-25.00	28.01	H
7619.01	-53.19	8.06	12.30	-48.95	-25.00	23.95	H
10182.01	-51.53	9.33	12.97	-47.89	-25.00	22.89	H
12758.00	-45.68	10.57	13.35	-42.90	-25.00	17.90	H
15268.00	-42.81	11.32	13.84	-40.29	-25.00	15.29	H
17836.00	-38.09	12.78	15.37	-35.50	-25.00	10.50	H

**5G NR SA n41, 100MHz, QPSK, Channel 518598**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5189.01	-56.31	6.94	10.16	-53.09	-25.00	28.09	H
7791.01	-53.38	8.30	12.43	-49.25	-25.00	24.25	V
10399.01	-48.68	9.80	13.06	-45.42	-25.00	20.42	H
12993.00	-47.25	10.47	13.50	-44.22	-25.00	19.22	V
15546.00	-41.66	11.51	13.70	-39.47	-25.00	14.47	H
16858.00	-37.73	12.05	13.74	-36.04	-25.00	11.04	H

**5G NR SA n41, 100MHz, QPSK, Channel 528000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
6607.01	-50.65	7.83	11.13	-47.35	-25.00	22.35	V
7939.01	-52.97	8.39	12.55	-48.81	-25.00	23.81	H
10574.00	-48.57	9.38	13.11	-44.84	-25.00	19.84	V
13223.00	-45.29	10.52	13.81	-42.00	-25.00	17.00	V
15859.00	-40.12	11.63	13.70	-38.05	-25.00	13.05	V
17172.00	-37.67	12.44	14.18	-35.93	-25.00	10.93	H

Note: The measurement results showed here are worst cases.

**Set.2-1, ANT1**
**5G NR SA n66, 5MHz, QPSK, Channel 342500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3438.01	-71.71	5.41	8.05	-69.07	-13.00	56.07	H
5111.01	-69.02	6.80	10.06	-65.76	-13.00	52.76	V
6857.01	-64.58	7.81	11.43	-60.96	-13.00	47.96	V
8558.01	-63.79	8.57	13.01	-59.35	-13.00	46.35	V
10279.01	-61.63	9.57	13.01	-58.19	-13.00	45.19	V
11967.00	-58.08	10.21	13.01	-55.28	-13.00	42.28	H

**5G NR SA n66, 5MHz, QPSK, Channel 349000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3486.01	-71.76	5.49	8.17	-69.08	-13.00	56.08	H
5252.01	-69.75	7.00	10.25	-66.50	-13.00	53.50	V
6997.01	-64.22	8.27	11.60	-60.89	-13.00	47.89	V
8737.01	-63.71	8.47	13.05	-59.13	-13.00	46.13	V
10452.01	-60.14	9.72	13.08	-56.78	-13.00	43.78	V
12230.00	-57.80	10.04	13.09	-54.75	-13.00	41.75	H

**5G NR SA n66, 5MHz, QPSK, Channel 355500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3473.01	-71.85	5.47	8.14	-69.18	-13.00	56.18	H
5252.01	-69.73	7.00	10.25	-66.48	-13.00	53.48	V
6995.01	-64.08	8.26	11.59	-60.75	-13.00	47.75	V
8742.01	-63.84	8.49	13.05	-59.28	-13.00	46.28	V
10459.01	-60.25	9.71	13.08	-56.88	-13.00	43.88	V
12231.00	-57.94	10.04	13.09	-54.89	-13.00	41.89	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT3**
**5G NR SA n71, 20MHz, QPSK, Channel 34600**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1313.01	-55.08	3.13	4.53	2.15	-55.83	-13.00	42.83	H
1994.01	-49.68	4.04	4.61	2.15	-51.26	-13.00	38.26	H
2666.50	-45.65	4.76	6.40	2.15	-46.16	-13.00	33.16	H
3312.72	-59.83	5.29	7.75	2.15	-59.52	-13.00	46.52	V
3979.89	-58.47	6.08	8.87	2.15	-57.83	-13.00	44.83	V
4655.43	-57.22	6.47	9.56	2.15	-56.28	-13.00	43.28	V

**5G NR SA n71, 20MHz, QPSK, Channel 36100**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1336.51	-55.59	3.16	4.65	2.15	-56.25	-13.00	43.25	H
2012.50	-49.35	4.09	4.64	2.15	-50.95	-13.00	37.95	H
2672.50	-44.87	4.76	6.41	2.15	-45.37	-13.00	32.37	H
3347.54	-59.41	5.32	7.83	2.15	-59.05	-13.00	46.05	V
4026.55	-58.65	6.05	8.93	2.15	-57.92	-13.00	44.92	H
4706.27	-57.12	6.51	9.61	2.15	-56.17	-13.00	43.17	V

**5G NR SA n5, 20MHz, QPSK, Channel 37600**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1361.01	-56.60	3.19	4.78	2.15	-57.16	-13.00	44.16	V
2022.00	-49.76	4.12	4.67	2.15	-51.36	-13.00	38.36	H
2707.50	-44.95	4.79	6.47	2.15	-45.42	-13.00	32.42	H
3394.20	-59.11	5.36	7.95	2.15	-58.67	-13.00	45.67	V
4058.59	-58.20	6.04	8.96	2.15	-57.43	-13.00	44.43	H
4739.70	-56.53	6.55	9.64	2.15	-55.59	-13.00	42.59	V

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT6(LTE) + ANT1(5G NR)**
**5G NR NSA DC\_4A\_n2, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH20525+CH500500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3438.01	-71.71	5.41	8.05	-69.07	-13.00	56.07	H
5111.01	-69.02	6.80	10.06	-65.76	-13.00	52.76	V
6857.01	-64.58	7.81	11.43	-60.96	-13.00	47.96	V
8558.01	-63.79	8.57	13.01	-59.35	-13.00	46.35	V
10279.01	-61.63	9.57	13.01	-58.19	-13.00	45.19	V
11967.00	-58.08	10.21	13.01	-55.28	-13.00	42.28	H

**5G NR NSA DC\_4A\_n2, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH20525+CH507000\_**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3486.01	-71.76	5.49	8.17	-69.08	-13.00	56.08	H
5252.01	-69.75	7.00	10.25	-66.50	-13.00	53.50	V
6997.01	-64.22	8.27	11.60	-60.89	-13.00	47.89	V
8737.01	-63.71	8.47	13.05	-59.13	-13.00	46.13	V
10452.01	-60.14	9.72	13.08	-56.78	-13.00	43.78	V
12230.00	-57.80	10.04	13.09	-54.75	-13.00	41.75	H

**5G NR NSA DC\_4A\_n2, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH20525+CH513500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3473.01	-71.85	5.47	8.14	-69.18	-13.00	56.18	H
5252.01	-69.73	7.00	10.25	-66.48	-13.00	53.48	V
6995.01	-64.08	8.26	11.59	-60.75	-13.00	47.75	V
8742.01	-63.84	8.49	13.05	-59.28	-13.00	46.28	V
10459.01	-60.25	9.71	13.08	-56.88	-13.00	43.88	V
12231.00	-57.94	10.04	13.09	-54.89	-13.00	41.89	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT4(LTE) + ANT2(5G NR)**
**5G NR NSA DC\_7A\_n2, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH21100+372000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3691.01	-60.10	6.45	8.47	-58.08	-13.00	45.08	V
5573.01	-58.83	7.21	10.59	-55.45	-13.00	42.45	H
7443.01	-53.01	8.24	12.13	-49.12	-13.00	36.12	H
9281.01	-52.27	9.11	13.27	-48.11	-13.00	35.11	H
11180.00	-51.03	9.49	13.16	-47.36	-13.00	34.36	H
13025.00	-45.91	10.58	13.54	-42.95	-13.00	29.95	V

**5G NR NSA DC\_7A\_n2, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH21100+376000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3743.01	-58.88	6.31	8.54	-56.65	-13.00	43.65	V
5624.01	-58.18	7.26	10.58	-54.86	-13.00	41.86	H
7530.01	-53.49	8.27	12.22	-49.54	-13.00	36.54	H
9377.01	-52.75	9.06	13.33	-48.48	-13.00	35.48	V
11255.00	-49.40	9.73	13.15	-45.98	-13.00	32.98	H
13155.00	-44.07	10.69	13.72	-41.04	-13.00	28.04	H

**5G NR NSA DC\_7A\_n2, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH21100+380000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3774.01	-59.90	6.22	8.58	-57.54	-13.00	44.54	V
5693.01	-57.51	7.29	10.56	-54.24	-13.00	41.24	V
7598.01	-53.91	7.98	12.28	-49.61	-13.00	36.61	V
9484.01	-53.32	9.46	13.39	-49.39	-13.00	36.39	V
11426.00	-48.78	10.00	13.11	-45.67	-13.00	32.67	V
13322.00	-43.92	10.58	13.95	-40.55	-13.00	27.55	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT9(LTE) + ANT0(5G NR)**
**5G NR NSA DC\_7A\_n5, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+CH165300**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1423.01	-55.60	3.26	5.10	2.15	-55.91	-13.00	42.91	H
2133.00	-49.52	4.23	5.00	2.15	-50.90	-13.00	37.90	H
2820.50	-44.66	4.94	6.68	2.15	-45.07	-13.00	32.07	H
3541.84	-57.93	5.74	8.26	2.15	-57.56	-13.00	44.56	V
4257.77	-57.68	6.23	9.16	2.15	-56.90	-13.00	43.90	V
4956.98	-56.27	6.68	9.86	2.15	-55.24	-13.00	42.24	V

**5G NR NSA DC\_7A\_n5, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+CH167300**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1681.01	-54.67	3.59	5.17	2.15	-55.24	-13.00	42.24	H
2521.00	-45.93	4.65	6.14	2.15	-46.59	-13.00	33.59	H
3346.14	-58.43	5.31	7.83	2.15	-58.06	-13.00	45.06	V
4172.11	-57.38	6.14	9.07	2.15	-56.60	-13.00	43.60	V
5023.14	-57.36	6.56	9.93	2.15	-56.14	-13.00	43.14	V
5870.00	-55.78	7.30	10.53	2.15	-54.70	-13.00	41.70	H

**5G NR NSA DC\_7A\_n5, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+CH169300**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1665.01	-54.83	3.58	5.20	2.15	-55.36	-13.00	42.36	H
2518.00	-45.88	4.64	6.13	2.15	-46.54	-13.00	33.54	H
3364.95	-59.43	5.33	7.88	2.15	-59.03	-13.00	46.03	V
4174.89	-57.20	6.15	9.07	2.15	-56.43	-13.00	43.43	V
5014.09	-56.52	6.58	9.92	2.15	-55.33	-13.00	42.33	H
5876.96	-55.05	7.32	10.52	2.15	-54.00	-13.00	41.00	V

Note:The measurement results showed here are worst cases.



**Set.2-1, ANT3(LTE) + ANT9(5G NR)**
**5G NR NSA DC\_5A\_n7, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+502000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5041.01	-59.22	6.61	9.96	-55.87	-25.00	30.87	H
7559.01	-53.62	8.15	12.25	-49.52	-25.00	24.52	V
10010.01	-51.50	9.21	12.90	-47.81	-25.00	22.81	H
12560.00	-47.61	10.35	13.24	-44.72	-25.00	19.72	V
15039.00	-43.80	11.27	13.98	-41.09	-25.00	16.09	V
17540.00	-39.84	12.88	14.96	-37.76	-25.00	12.76	V

**5G NR NSA DC\_5A\_n7, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+507000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5075.01	-58.05	6.70	10.01	-54.74	-25.00	29.74	V
7586.01	-54.21	8.03	12.27	-49.97	-25.00	24.97	V
10142.01	-52.72	9.39	12.96	-49.15	-25.00	24.15	V
12654.00	-47.68	10.38	13.29	-44.77	-25.00	19.77	H
15237.00	-43.98	11.35	13.86	-41.47	-25.00	16.47	H
17746.00	-39.42	12.44	15.24	-36.62	-25.00	11.62	V

**5G NR NSA DC\_5A\_n7, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+512000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5100.01	-59.10	6.77	10.04	-55.83	-25.00	30.83	V
7707.01	-54.52	8.42	12.37	-50.57	-25.00	25.57	V
10264.01	-51.30	9.52	13.01	-47.81	-25.00	22.81	V
12807.00	-46.85	10.75	13.38	-44.22	-25.00	19.22	H
15361.00	-43.49	11.35	13.78	-41.06	-25.00	16.06	H
17899.00	-38.95	12.87	15.46	-36.36	-25.00	11.36	V

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT1(LTE) + ANT4(5G NR)**
**5G NR NSA DC\_66A\_n7, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH132322+500500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4970.01	-59.36	6.66	9.87	-56.15	-25.00	31.15	V
7455.01	-52.84	8.27	12.15	-48.96	-25.00	23.96	H
9916.01	-52.91	9.10	12.98	-49.03	-25.00	24.03	V
12392.00	-47.58	10.40	13.16	-44.82	-25.00	19.82	H
14870.00	-44.39	11.17	14.10	-41.46	-25.00	16.46	V
17365.00	-38.38	12.45	14.60	-36.23	-25.00	11.23	V

**5G NR NSA DC\_66A\_n7, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH132322+507000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5011.01	-59.21	6.58	9.92	-55.87	-25.00	30.87	H
7513.01	-53.60	8.34	12.21	-49.73	-25.00	24.73	H
10019.01	-51.92	9.23	12.91	-48.24	-25.00	23.24	H
12533.00	-47.57	10.27	13.22	-44.62	-25.00	19.62	H
14977.00	-43.70	11.21	14.02	-40.89	-25.00	15.89	V
17477.00	-40.02	12.67	14.85	-37.84	-25.00	12.84	V

**5G NR NSA DC\_66A\_n7, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH132322+513500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5127.01	-58.36	6.85	10.08	-55.13	-25.00	30.13	V
7724.01	-54.51	8.39	12.38	-50.52	-25.00	25.52	V
10268.01	-50.68	9.53	13.01	-47.20	-25.00	22.20	V
12805.00	-47.71	10.75	13.38	-45.08	-25.00	20.08	H
15366.00	-43.70	11.35	13.78	-41.27	-25.00	16.27	H
16669.00	-41.01	11.82	13.67	-39.16	-25.00	14.16	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT0(LTE) + ANT9(5G NR)**
**5G NR NSA DC\_5A\_n38, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+516000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5136.01	-59.38	6.86	10.09	-56.15	-25.00	31.15	V
7767.01	-54.97	8.33	12.41	-50.89	-25.00	25.89	H
10343.01	-50.94	9.71	13.04	-47.61	-25.00	22.61	V
12897.00	-46.58	10.51	13.44	-43.65	-25.00	18.65	H
15486.00	-43.45	11.52	13.71	-41.26	-25.00	16.26	H
16757.00	-40.47	11.95	13.70	-38.72	-25.00	13.72	H

**5G NR NSA DC\_5A\_n38, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+519000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5167.01	-58.99	6.91	10.13	-55.77	-25.00	30.77	V
7755.01	-54.10	8.35	12.40	-50.05	-25.00	25.05	V
10384.01	-50.07	9.78	13.05	-46.80	-25.00	21.80	V
13003.00	-46.21	10.48	13.50	-43.19	-25.00	18.19	H
15553.00	-43.81	11.51	13.70	-41.62	-25.00	16.62	V
16852.00	-38.22	12.05	13.74	-36.53	-25.00	11.53	H

**5G NR NSA DC\_5A\_n38, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH20525+522000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5193.01	-59.61	6.95	10.17	-56.39	-25.00	31.39	H
7847.01	-54.83	8.35	12.48	-50.70	-25.00	25.70	H
10453.01	-50.17	9.72	13.08	-46.81	-25.00	21.81	V
13084.00	-44.91	10.86	13.62	-42.15	-25.00	17.15	V
15653.00	-43.73	11.55	13.70	-41.58	-25.00	16.58	H
16968.00	-40.19	12.25	13.79	-38.65	-25.00	13.65	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT3(LTE) + ANT4(5G NR)**
**5G NR NSA DC\_12A\_n38, 5MHz(LTE)+10MHz(5G NR), DFT-QPSK, CH23095+515000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5171.01	-59.61	6.91	10.14	-56.38	-25.00	31.38	H
7743.01	-54.58	8.37	12.39	-50.56	-25.00	25.56	H
10305.01	-51.17	9.65	13.02	-47.80	-25.00	22.80	V
12886.00	-47.51	10.54	13.43	-44.62	-25.00	19.62	H
15466.00	-43.58	11.49	13.72	-41.35	-25.00	16.35	H
17998.00	-41.90	12.90	15.60	-39.20	-25.00	14.20	H

**5G NR NSA DC\_12A\_n38, 5MHz(LTE)+10MHz(5G NR), DFT-QPSK, CH23095+519000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5185.01	-58.68	6.94	10.16	-55.46	-25.00	30.46	H
7758.01	-54.27	8.35	12.41	-50.21	-25.00	25.21	V
10354.01	-49.72	9.73	13.04	-46.41	-25.00	21.41	H
12962.00	-46.59	10.48	13.48	-43.59	-25.00	18.59	H
15596.00	-44.20	11.49	13.70	-41.99	-25.00	16.99	H
16877.00	-38.01	12.02	13.75	-36.28	-25.00	11.28	H

**5G NR NSA DC\_12A\_n38, 5MHz(LTE)+10MHz(5G NR), DFT-QPSK, CH23095+523000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5211.01	-58.70	6.98	10.20	-55.48	-25.00	30.48	V
7850.01	-54.27	8.36	12.48	-50.15	-25.00	25.15	H
10452.01	-49.03	9.72	13.08	-45.67	-25.00	20.67	H
13096.00	-44.54	10.92	13.63	-41.83	-25.00	16.83	V
15676.00	-44.03	11.58	13.70	-41.91	-25.00	16.91	V
16990.00	-40.32	12.34	13.80	-38.86	-25.00	13.86	H

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT0(LTE) + ANT9(5G NR)**
**5G NR NSA DC\_5A\_n41, 5MHz(LTE)+100MHz(5G NR), DFT-QPSK, CH20525+509202**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5106.01	-58.86	6.79	10.05	-55.60	-25.00	30.60	V
7620.01	-54.50	8.06	12.30	-50.26	-25.00	25.26	V
10212.01	-51.90	9.34	12.98	-48.26	-25.00	23.26	V
12755.00	-47.33	10.56	13.35	-44.54	-25.00	19.54	H
15263.00	-43.65	11.32	13.84	-41.13	-25.00	16.13	H
16579.00	-41.32	12.02	13.63	-39.71	-25.00	14.71	V

**5G NR NSA DC\_5A\_n41, 5MHz(LTE)+100MHz(5G NR), DFT-QPSK, CH20525+518598**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5161.01	-58.75	6.90	10.13	-55.52	-25.00	30.52	H
7759.01	-55.19	8.34	12.41	-51.12	-25.00	26.12	V
10344.01	-50.35	9.71	13.04	-47.02	-25.00	22.02	H
12982.00	-47.06	10.47	13.49	-44.04	-25.00	19.04	V
15569.00	-43.49	11.50	13.70	-41.29	-25.00	16.29	H
16851.00	-39.05	12.05	13.74	-37.36	-25.00	12.36	H

**5G NR NSA DC\_5A\_n41, 5MHz(LTE)+100MHz(5G NR), DFT-QPSK, CH20525+528000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5284.01	-59.55	6.99	10.30	-56.24	-25.00	31.24	H
7901.01	-53.93	8.43	12.52	-49.84	-25.00	24.84	H
10563.00	-50.96	9.42	13.11	-47.27	-25.00	22.27	H
13176.00	-44.34	10.60	13.75	-41.19	-25.00	16.19	H
15824.00	-43.27	11.65	13.70	-41.22	-25.00	16.22	V
17193.00	-38.32	12.37	14.22	-36.47	-25.00	11.47	V

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT0(LTE) + ANT1(5G NR)**
**5G NR NSA DC\_26A\_n41, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH26915+501204**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4998.01	-59.35	6.61	9.90	-56.06	-25.00	31.06	H
7490.01	-53.56	8.37	12.19	-49.74	-25.00	24.74	V
10013.01	-53.01	9.22	12.91	-49.32	-25.00	24.32	H
12467.00	-48.17	10.26	13.19	-45.24	-25.00	20.24	V
15005.00	-44.54	11.22	14.00	-41.76	-25.00	16.76	H
17454.00	-38.63	12.62	14.80	-36.45	-25.00	11.45	H

**5G NR NSA DC\_26A\_n41, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH26915+518598**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5174.01	-60.03	6.92	10.14	-56.81	-25.00	31.81	H
7807.01	-54.87	8.30	12.45	-50.72	-25.00	25.72	H
10393.01	-50.07	9.79	13.06	-46.80	-25.00	21.80	V
12947.00	-47.52	10.49	13.47	-44.54	-25.00	19.54	H
15566.00	-43.54	11.50	13.70	-41.34	-25.00	16.34	V
16836.00	-39.05	12.07	13.73	-37.39	-25.00	12.39	H

**5G NR NSA DC\_26A\_n41, 5MHz(LTE)+20MHz(5G NR), DFT-QPSK, CH26915+535998**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5320.01	-59.83	6.99	10.35	-56.47	-25.00	31.47	H
8013.01	-54.27	8.32	12.61	-49.98	-25.00	24.98	H
10699.00	-51.94	9.30	13.14	-48.10	-25.00	23.10	V
13374.00	-44.59	10.57	14.02	-41.14	-25.00	16.14	H
16034.00	-43.53	11.83	13.69	-41.67	-25.00	16.67	V
17378.00	-39.15	12.47	14.63	-36.99	-25.00	11.99	V

Note:The measurement results showed here are worst cases.

**Set.2-1, ANT9(LTE) + ANT1(5G NR)**
**5G NR NSA DC\_7A\_n66, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+342500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3442.01	-71.53	5.41	8.06	-68.88	-13.00	55.88	H
5125.01	-69.12	6.84	10.08	-65.88	-13.00	52.88	V
6856.01	-64.63	7.82	11.43	-61.02	-13.00	48.02	V
8579.01	-63.79	8.53	13.02	-59.30	-13.00	46.30	V
10284.01	-61.13	9.59	13.01	-57.71	-13.00	44.71	V
11999.00	-57.99	10.06	13.00	-55.05	-13.00	42.05	V

**5G NR NSA DC\_7A\_n66, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+349000**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3475.01	-71.76	5.47	8.14	-69.09	-13.00	56.09	H
5246.01	-69.77	7.00	10.24	-66.53	-13.00	53.53	V
6995.01	-64.22	8.26	11.59	-60.89	-13.00	47.89	V
8743.01	-63.72	8.49	13.05	-59.16	-13.00	46.16	V
10455.01	-60.15	9.72	13.08	-56.79	-13.00	43.79	V
12233.00	-57.58	10.04	13.09	-54.53	-13.00	41.53	H

**5G NR NSA DC\_7A\_n66, 5MHz(LTE)+5MHz(5G NR), DFT-QPSK, CH21100+355500**

Frequency (MHz)	P <sub>Mea</sub> (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3553.01	-70.59	5.85	8.27	-68.17	-13.00	55.17	V
5326.01	-69.83	6.99	10.36	-66.46	-13.00	53.46	V
7105.01	-65.35	8.16	11.73	-61.78	-13.00	48.78	H
8907.01	-64.01	8.87	13.08	-59.80	-13.00	46.80	V
10652.00	-60.87	9.29	13.13	-57.03	-13.00	44.03	V

Note:The measurement results showed here are worst cases.

## Annex B: Accreditation Certificate

**United States Department of Commerce  
National Institute of Standards and Technology**

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**Certificate of Accreditation to ISO/IEC 17025:2017**

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NVLAP LAB CODE: 600118-0

**Telecommunication Technology Labs, CAICT**  
Beijing  
China

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Electromagnetic Compatibility & Telecommunications**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2020-09-29 through 2021-09-30  
Effective Dates



  
For the National Voluntary Laboratory Accreditation Program

\*\*\*END OF REPORT\*\*\*