



FCC RF Test Report

APPLICANT : Nextivity, Inc.
EQUIPMENT : SHIELD MegaFi 2
BRAND NAME : Nextivity
MODEL NAME : M4D-UC
FCC ID : YETM4D-UC
STANDARD : 47 CFR Part 27 Subpart O (3700-3980MHz)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Dec. 26, 2024 ~ Jan. 20, 2025

This product installed a RF module (Brand Name: Telit, Model Name: FN990A40, FCC ID: RI7FN990A40) during the test, only Conducted Power, EIRP and RSE test items are tested in this report, all the other test results are leveraged from module RF report.

We, Sporton International Inc. (KunShan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (KunShan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG492317M	Rev. 01	Initial issue of report	Feb. 10, 2025



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
-	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	Reporting Only	PASS	1
-	§2.1051 §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1051 §27.53(l)(2)	Conducted Spurious Emission (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	1
4.4	§2.1053 §27.53(l)(2)	Radiated Spurious Emission (5G NR n77, n78)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 36.54 dB at 11376.00 MHz

Remark 1: The conducted test results were leveraged from module RF report which can refer to Report No. FG270608I.

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Nextivity, Inc.

16550 West Bernardo Drive, Building 5, Suite 550, San Diego, CA 92127 USA

1.2 Manufacturer

Asiatelco Technologies Co.

#68 HuaTuo Road, Building-8, Zhangjiang Hi-Tech Park, Pudong, Shanghai 201204, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	SHIELD MegaFi 2
Brand Name	Nextivity
Model Name	M4D-UC
FCC ID	YETM4D-UC
SN	Conducted : 243902000029 Radiation : 243902000026
HW Version	1.0
SW Version	1.2.0.0
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency	5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
SCS	30kHz
Bandwidth	n77: 20 / 30 / 40 / 60 / 80 / 100MHz n78: 20 / 30 / 40 / 50 / 60 / 70 / 80 / 90 / 100MHz
Antenna Type	Dipole Antenna
Antenna Gain	<Ant.0> Paddle antenna: 5G NR n77/78: 3.6 dBi Sharkfin antenna: 5G NR n77/78: 3.8 dBi <Ant.2> Paddle antenna: 5G NR n77/78: 3.6 dBi Sharkfin antenna: 5G NR n77/78: 3.8 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. There are two type of EUT, which only differ in antenna. Sample 1 with paddle antenna and sample 2 with sharkfin antenna. Based on the max antenna gain, we chose sample 2 for RF testing
2. 5G NR n77/n78 support SA mode and NSA mode. According to the maximum power between SA

and NSA mode, SA covers NSA mode.

3. The device supports HPUE (PC2) mode for 5G NR n77/n78.
4. 5G NR n77/n78 supports SISO mode on Ant 2 only.
5. 5G NR n77/n78 supports UL MIMO mode for Ant (0+2), and only supports CP-OFDM Modulation, the MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.
6. The EN-DC mode combination could be referred to the product spec.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum EIRP and Emission Designator

5G NR n77 SA for SCS 30kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.8091	-	0.6607	-
30	3715.02 ~ 3964.98	0.8279	-	0.6761	-
40	3720.00 ~ 3960.00	0.8610	-	0.6902	-
60	3730.02 ~ 3949.98	0.7962	-	0.6383	-
80	3740.01 ~ 3939.99	0.7499	-	0.6095	-
100	3750.00 ~ 3930.00	0.8260	-	0.6683	-

5G NR n78 SA for SCS 30kHz		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.8375	-	0.6792	-
30	3715.02 ~ 3784.98	0.8770	-	0.7228	-
40	3720.00 ~ 3780.00	0.8433	-	0.7178	-
50	3725.01 ~ 3774.99	0.8204	-	0.6546	-
60	3730.02 ~ 3769.98	0.8147	-	0.6637	-
70	3735.00 ~ 3765.00	0.8147	-	0.6577	-
80	3740.01 ~ 3759.99	0.8433	-	0.6792	-
90	3745.02 ~ 3754.98	0.8375	-	0.6776	-
100	3750.00 ~ 3750.00	0.8531	-	0.6934	-



5G NR n77 UL MIMO for SCS 30kHz		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3969.99	0.6145	-	0.5317	-
30	3715.02 ~ 3964.98	0.6172	-	0.5292	-
40	3720.00 ~ 3960.00	0.6343	-	0.5387	-
60	3730.02 ~ 3949.98	0.5950	-	0.5103	-
80	3740.01 ~ 3939.99	0.5630	-	0.4731	-
100	3750.00 ~ 3930.00	0.6519	-	0.6238	-

5G NR n78 UL MIMO for SCS 30kHz		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20	3710.01 ~ 3789.99	0.6220	-	0.5654	-
30	3715.02 ~ 3784.98	0.6271	-	0.5522	-
40	3720.00 ~ 3780.00	0.6382	-	0.5660	-
50	3725.01 ~ 3774.99	0.6143	-	0.5335	-
60	3730.02 ~ 3769.98	0.6119	-	0.5231	-
70	3735.00 ~ 3765.00	0.6296	-	0.5684	-
80	3740.01 ~ 3759.99	0.5957	-	0.5041	-
90	3745.02 ~ 3754.98	0.5992	-	0.5879	-
100	3750.00 ~ 3750.00	0.5958	-	0.5201	-

Note: All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH03-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC_5GNR_China_2 01027	1.0
2.	03CH03-KS	AUDIX	E3	210616

1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

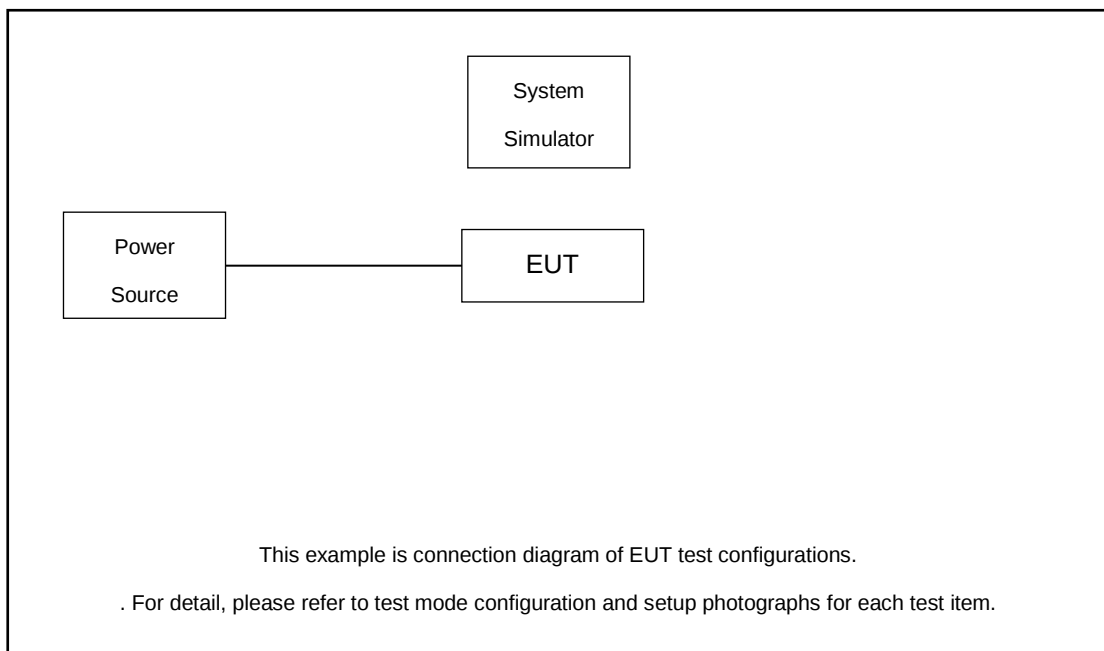
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR	Bandwidth (MHz)										Modulation					RB #			Test Channel		
		20	30	40	45	50	60	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256 QAM	1	Partial	Full	L	M	H
Max. Output Power	n77	v	v	v	-	-	v	-	v	-	v	v	v	v	v	v	v		v	v	v	v
	n78	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
E.I.R.P	n77	v	v	v	-	-	v	-	v	-	v	v	v	v	v	v	v		v	v	v	v
	n78	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	n77	Worst Case																			v	
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. 5G NR n77 overlaps the entire frequency range of n78. Therefore, the test results provided in this report covers n77 as well as n78.																					

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m



2.4 Frequency List of Low/Middle/High Channels

5G n77 (30kHz) Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98
20	Channel	647334	656000	664666
	Frequency	3710.01	3840	3969.99

5G n78(30kHz) Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000		
	Frequency	3750		
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735	3750	3765
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720	3750	3780
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99

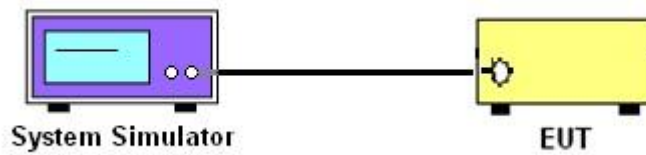
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n77, n78.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

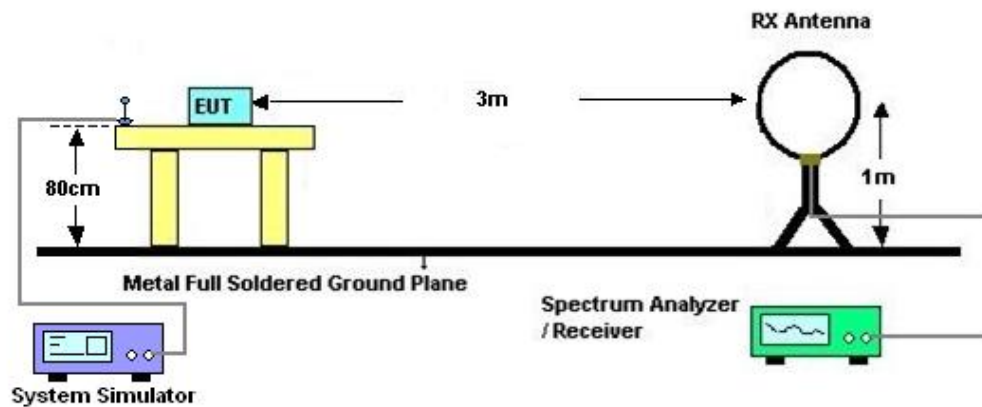
4 Radiated Test Items

4.1 Measuring Instruments

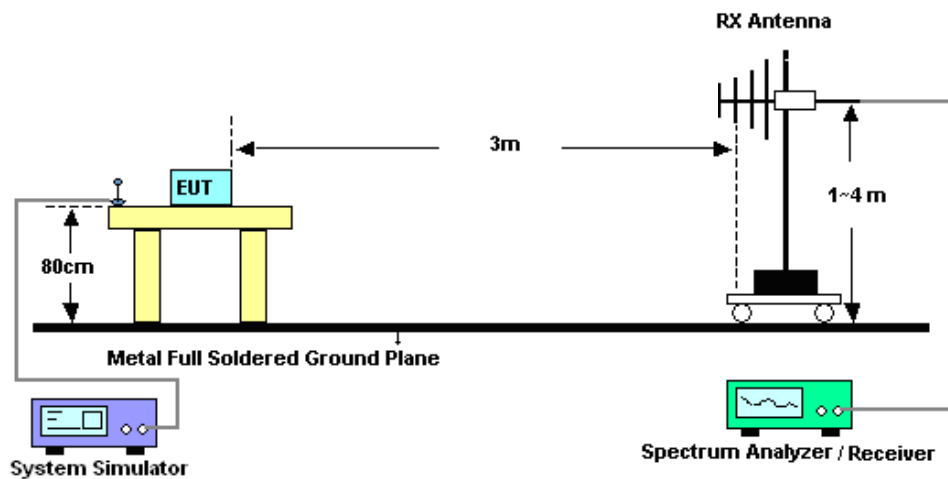
See list of measuring instruments of this test report.

4.2 Test Setup

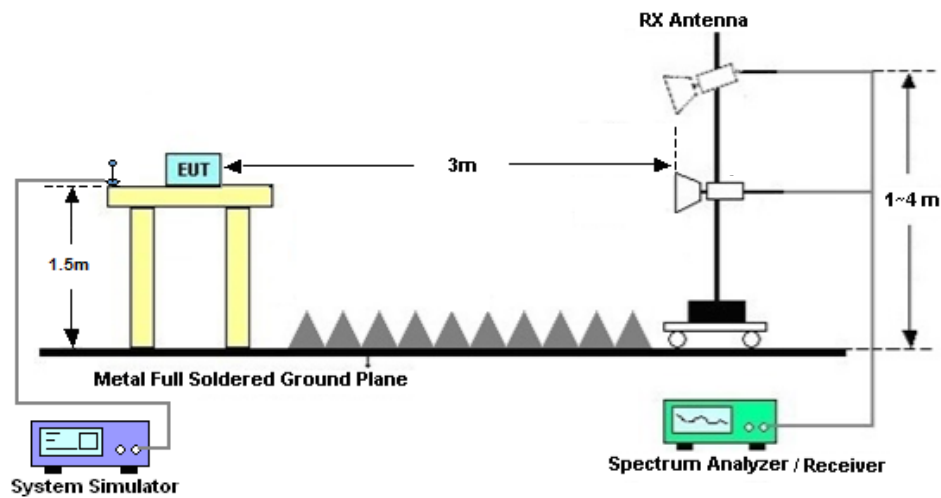
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
1. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
10. $ERP \text{ (dBm)} = EIRP - 2.15$
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$

$$= -13\text{dBm}.$$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Jan. 20, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jan. 20, 2025	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jan. 20, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 11, 2024	Dec. 26, 2024	Oct. 10, 2025	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 18, 2024	Dec. 26, 2024	Apr. 13, 2025	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Dec. 26, 2024	Sep. 07, 2025	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz~1GHz	Dec. 05, 2024	Dec. 26, 2024	Dec. 04, 2025	Radiation (03CH03-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00251982	1GHz~18GHz	Aug. 16, 2024	Dec. 26, 2024	Aug. 15, 2025	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Dec. 26, 2024	Oct. 21, 2025	Radiation (03CH03-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 03, 2024	Dec. 26, 2024	Jul. 02, 2025	Radiation (03CH03-KS)
Amplifier	EM	EM18G40G A	060851	18~40GHz	Jan. 03, 2024	Dec. 26, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
high gain Amplifier	EM	EM01G18G A	060834	1Ghz~18Ghz	Dec. 02, 2024	Dec. 26, 2024	Dec. 01, 2025	Radiation (03CH03-KS)
Amplifier	EM	EM01G18G A	EM	1GHz~26.5GHz	Oct. 09, 2024	Dec. 26, 2024	Oct. 08, 2025	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 26, 2024	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 26, 2024	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 26, 2024	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required

6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Conducted Power	± 0.50 dB
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Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.30dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.84dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.84dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.83dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Smile Wang	Temperature :	22~23°C
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

5G NR n77

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	25.28	29.08	0.8091
77	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	25.28	29.08	0.8091
77	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	24.4	28.2	0.6607
77	30	20	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.83	28.63	0.7295
77	30	20	656000	3840	DFT-s-OFDM QPSK	1@1	24.77	28.57	0.7194
77	30	20	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.88	27.68	0.5861
77	30	20	664666	3969.99	DFT-s-OFDM PI/2 BPSK	1@1	24.97	28.77	0.7534
77	30	20	664666	3969.99	DFT-s-OFDM QPSK	1@1	24.93	28.73	0.7464
77	30	20	664666	3969.99	DFT-s-OFDM 16 QAM	1@1	24.07	27.87	0.6124
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	25.38	29.18	0.8279
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	25.35	29.15	0.8222
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	24.5	28.3	0.6761
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.94	28.74	0.7482
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@1	24.87	28.67	0.7362
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@1	24.02	27.82	0.6053
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@1	24.86	28.66	0.7345
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@1	24.79	28.59	0.7228
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@1	23.88	27.68	0.5861
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	25.55	29.35	0.8610
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	25.47	29.27	0.8453
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	24.59	28.39	0.6902
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	25.09	28.89	0.7745
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	25.15	28.95	0.7852
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	24.14	27.94	0.6223
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	24.95	28.75	0.7499
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	24.89	28.69	0.7396
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	23.99	27.79	0.6012
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	25.21	29.01	0.7962
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	25.14	28.94	0.7834
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	24.25	28.05	0.6383
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.84	28.64	0.7311
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	24.79	28.59	0.7228
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.89	27.69	0.5875
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	24.65	28.45	0.6998
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	24.63	28.43	0.6966
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	23.73	27.53	0.5662
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	24.95	28.75	0.7499
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	24.93	28.73	0.7464



77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	24.05	27.85	0.6095
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.81	28.61	0.7261
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	24.78	28.58	0.7211
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.85	27.65	0.5821
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	24.47	28.27	0.6714
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	24.47	28.27	0.6714
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	23.54	27.34	0.5420
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	24.77	28.57	0.7194
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.37	29.17	0.8260
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	25.34	29.14	0.8204
77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	24.69	28.49	0.7063
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	25.35	29.15	0.8222
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	25.35	29.15	0.8222
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	23.67	27.47	0.5585
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.45	28.25	0.6683
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	24.42	28.22	0.6637
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	22.21	26.01	0.3990
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	22.92	26.72	0.4699
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	22.84	26.64	0.4613
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	20.22	24.02	0.2523
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	20.64	24.44	0.2780
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	20.54	24.34	0.2716
77	30	100	650000	3750	CP-OFDM QPSK	137@68	23.2	27	0.5012
77	30	100	650000	3750	CP-OFDM QPSK	1@1	23.89	27.69	0.5875
77	30	100	650000	3750	CP-OFDM QPSK	1@271	23.78	27.58	0.5728
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	24.68	28.48	0.7047
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	24.76	28.56	0.7178
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	24.68	28.48	0.7047
77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	24.66	28.46	0.7015
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	24.72	28.52	0.7112
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	24.64	28.44	0.6982
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	23.61	27.41	0.5508
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	23.83	27.63	0.5794
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@271	23.81	27.61	0.5768
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	22.1	25.9	0.3890
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	22.25	26.05	0.4027
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	22.22	26.02	0.3999
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	20.08	23.88	0.2443
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	19.95	23.75	0.2371
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	19.92	23.72	0.2355
77	30	100	656000	3840	CP-OFDM QPSK	137@68	23.02	26.82	0.4808
77	30	100	656000	3840	CP-OFDM QPSK	1@1	23.23	27.03	0.5047
77	30	100	656000	3840	CP-OFDM QPSK	1@271	23.15	26.95	0.4955
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	24.81	28.61	0.7261
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	24.45	28.25	0.6683
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	25.15	28.95	0.7852
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	24.77	28.57	0.7194
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	24.48	28.28	0.6730
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	25.13	28.93	0.7816
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	23.78	27.58	0.5728



77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	23.58	27.38	0.5470
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	24.29	28.09	0.6442
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	22.28	26.08	0.4055
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	21.94	25.74	0.3750
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	22.54	26.34	0.4305
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	20.29	24.09	0.2564
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	19.8	23.6	0.2291
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	20.39	24.19	0.2624
77	30	100	662000	3930	CP-OFDM QPSK	137@68	23.28	27.08	0.5105
77	30	100	662000	3930	CP-OFDM QPSK	1@1	23	26.8	0.4786
77	30	100	662000	3930	CP-OFDM QPSK	1@271	23.66	27.46	0.5572

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NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	ANT0 Power(dBm)	ANT2 Power(dBm)	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
77	30	20	647334	3710.01	CP-OFDM QPSK	1@1	20.87	21.27	24.08	27.88	0.6145
77	30	20	647334	3710.01	CP-OFDM 16 QAM	1@1	20.34	20.55	23.46	27.26	0.5317
77	30	20	647334	3710.01	CP-OFDM 64 QAM	1@1	19.25	19.37	22.32	26.12	0.4093
77	30	20	656000	3840	CP-OFDM QPSK	1@1	20.28	21.05	23.69	27.49	0.5614
77	30	20	656000	3840	CP-OFDM 16 QAM	1@1	19.73	20.45	23.12	26.92	0.4915
77	30	20	656000	3840	CP-OFDM 64 QAM	1@1	19.11	19.34	22.24	26.04	0.4015
77	30	20	664666	3969.99	CP-OFDM QPSK	1@1	20.5	21.25	23.90	27.70	0.5890
77	30	20	664666	3969.99	CP-OFDM 16 QAM	1@1	19.91	20.68	23.32	27.12	0.5155
77	30	20	664666	3969.99	CP-OFDM 64 QAM	1@1	18.96	19.12	22.05	25.85	0.3847
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	20.9	21.28	24.10	27.90	0.6172
77	30	30	647668	3715.02	CP-OFDM 16 QAM	1@1	20.35	20.5	23.44	27.24	0.5292
77	30	30	647668	3715.02	CP-OFDM 64 QAM	1@1	18.99	19.08	22.05	25.85	0.3842
77	30	30	656000	3840	CP-OFDM QPSK	1@1	20.43	21.21	23.85	27.65	0.5818
77	30	30	656000	3840	CP-OFDM 16 QAM	1@1	19.85	20.58	23.24	27.04	0.5059
77	30	30	656000	3840	CP-OFDM 64 QAM	1@1	18.89	19.11	22.01	25.81	0.3812
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	20.42	21.31	23.90	27.70	0.5886
77	30	30	664332	3964.98	CP-OFDM 16 QAM	1@1	19.88	20.58	23.25	27.05	0.5075
77	30	30	664332	3964.98	CP-OFDM 64 QAM	1@1	18.96	19.12	22.05	25.85	0.3847
77	30	40	648000	3720	CP-OFDM QPSK	1@1	21.05	21.37	24.22	28.02	0.6343
77	30	40	648000	3720	CP-OFDM 16 QAM	1@1	20.34	20.66	23.51	27.31	0.5387
77	30	40	648000	3720	CP-OFDM 64 QAM	1@1	18.89	19.22	22.07	25.87	0.3862
77	30	40	656000	3840	CP-OFDM QPSK	1@1	20.6	21.28	23.96	27.76	0.5975
77	30	40	656000	3840	CP-OFDM 16 QAM	1@1	20.05	20.68	23.39	27.19	0.5232
77	30	40	656000	3840	CP-OFDM 64 QAM	1@1	19.02	18.96	22.00	25.80	0.3802
77	30	40	664000	3960	CP-OFDM QPSK	1@1	20.43	21.29	23.89	27.69	0.5877
77	30	40	664000	3960	CP-OFDM 16 QAM	1@1	19.77	20.66	23.25	27.05	0.5068
77	30	40	664000	3960	CP-OFDM 64 QAM	1@1	18.86	19.12	22.00	25.80	0.3804
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	20.73	21.13	23.94	27.74	0.5950
77	30	60	648668	3730.02	CP-OFDM 16 QAM	1@1	20.1	20.43	23.28	27.08	0.5103
77	30	60	648668	3730.02	CP-OFDM 64 QAM	1@1	19.05	19.11	22.09	25.89	0.3882
77	30	60	656000	3840	CP-OFDM QPSK	1@1	20.35	20.95	23.67	27.47	0.5586
77	30	60	656000	3840	CP-OFDM 16 QAM	1@1	19.65	20.2	22.94	26.74	0.4725
77	30	60	656000	3840	CP-OFDM 64 QAM	1@1	18.69	19.23	21.98	25.78	0.3783
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	20.27	21.02	23.67	27.47	0.5587
77	30	60	663332	3949.98	CP-OFDM 16 QAM	1@1	19.58	20.25	22.94	26.74	0.4719



77	30	60	663332	3949.98	CP-OFDM 64 QAM	1@1	18.89	19.22	22.07	25.87	0.3862
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	20.49	20.89	23.70	27.50	0.5630
77	30	80	649334	3740.01	CP-OFDM 16 QAM	1@1	19.75	20.12	22.95	26.75	0.4731
77	30	80	649334	3740.01	CP-OFDM 64 QAM	1@1	18.65	19.23	21.96	25.76	0.3767
77	30	80	656000	3840	CP-OFDM QPSK	1@1	20.23	20.91	23.59	27.39	0.5487
77	30	80	656000	3840	CP-OFDM 16 QAM	1@1	19.61	20.22	22.94	26.74	0.4716
77	30	80	656000	3840	CP-OFDM 64 QAM	1@1	18.34	18.89	21.63	25.43	0.3495
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	20.02	21	23.55	27.35	0.5430
77	30	80	662666	3939.99	CP-OFDM 16 QAM	1@1	19.35	20.28	22.85	26.65	0.4624
77	30	80	662666	3939.99	CP-OFDM 64 QAM	1@1	18.34	19.22	21.81	25.61	0.3641
77	30	100	650000	3750	CP-OFDM QPSK	137@68	20.24	19.14	22.74	26.54	0.4503
77	30	100	650000	3750	CP-OFDM QPSK	1@1	21.22	21.44	24.34	28.14	0.6519
77	30	100	650000	3750	CP-OFDM QPSK	1@271	21.03	21.12	24.09	27.89	0.6145
77	30	100	650000	3750	CP-OFDM 16 QAM	137@68	20.14	21.01	23.61	27.41	0.5504
77	30	100	650000	3750	CP-OFDM 16 QAM	1@1	20.13	20.85	23.52	27.32	0.5389
77	30	100	650000	3750	CP-OFDM 16 QAM	1@271	21.12	21.16	24.15	27.95	0.6238
77	30	100	650000	3750	CP-OFDM 64 QAM	137@68	20.12	20.6	23.38	27.18	0.5220
77	30	100	650000	3750	CP-OFDM 64 QAM	1@1	20.21	20.2	23.22	27.02	0.5030
77	30	100	650000	3750	CP-OFDM 64 QAM	1@271	20.24	20.37	23.32	27.12	0.5147
77	30	100	650000	3750	CP-OFDM 256 QAM	137@68	18.23	19.07	21.68	25.48	0.3532
77	30	100	650000	3750	CP-OFDM 256 QAM	1@1	18.95	19.04	22.01	25.81	0.3807
77	30	100	650000	3750	CP-OFDM 256 QAM	1@271	18.93	19.24	22.10	25.90	0.3889
77	30	100	656000	3840	CP-OFDM QPSK	137@68	20.01	20.89	23.48	27.28	0.5349
77	30	100	656000	3840	CP-OFDM QPSK	1@1	20.24	20.77	23.52	27.32	0.5399
77	30	100	656000	3840	CP-OFDM QPSK	1@271	20.08	20.66	23.39	27.19	0.5236
77	30	100	656000	3840	CP-OFDM 16 QAM	137@68	19.53	20.42	23.01	26.81	0.4795
77	30	100	656000	3840	CP-OFDM 16 QAM	1@1	19.55	20.15	22.87	26.67	0.4646
77	30	100	656000	3840	CP-OFDM 16 QAM	1@271	19.45	20.04	22.77	26.57	0.4535
77	30	100	656000	3840	CP-OFDM 64 QAM	137@68	18.11	18.87	21.52	25.32	0.3402
77	30	100	656000	3840	CP-OFDM 64 QAM	1@1	18.32	19.03	21.70	25.50	0.3548
77	30	100	656000	3840	CP-OFDM 64 QAM	1@271	18.16	18.8	21.50	25.30	0.3390
77	30	100	656000	3840	CP-OFDM 256 QAM	137@68	18	18.89	21.48	25.28	0.3371
77	30	100	656000	3840	CP-OFDM 256 QAM	1@1	15.44	16.17	18.83	22.63	0.1833
77	30	100	656000	3840	CP-OFDM 256 QAM	1@271	15.17	15.96	18.59	22.39	0.1735
77	30	100	662000	3930	CP-OFDM QPSK	137@68	20.25	20.82	23.55	27.35	0.5438
77	30	100	662000	3930	CP-OFDM QPSK	1@1	20.04	20.86	23.48	27.28	0.5345
77	30	100	662000	3930	CP-OFDM QPSK	1@271	20.61	20.78	23.71	27.51	0.5631
77	30	100	662000	3930	CP-OFDM 16 QAM	137@68	19.84	20.39	23.13	26.93	0.4936
77	30	100	662000	3930	CP-OFDM 16 QAM	1@1	19.55	20.44	23.03	26.83	0.4817
77	30	100	662000	3930	CP-OFDM 16 QAM	1@271	20.03	20.03	23.04	26.84	0.4831
77	30	100	662000	3930	CP-OFDM 64 QAM	137@68	18.36	18.84	21.62	25.42	0.3481
77	30	100	662000	3930	CP-OFDM 64 QAM	1@1	18.13	19.06	21.63	25.43	0.3492
77	30	100	662000	3930	CP-OFDM 64 QAM	1@271	18.64	18.92	21.79	25.59	0.3625
77	30	100	662000	3930	CP-OFDM 256 QAM	137@68	18.28	18.9	21.61	25.41	0.3476
77	30	100	662000	3930	CP-OFDM 256 QAM	1@1	15.14	16.28	18.76	22.56	0.1802
77	30	100	662000	3930	CP-OFDM 256 QAM	1@271	15.74	15.92	18.84	22.64	0.1837



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NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	20	647334	3710.01	DFT-s-OFDM PI/2 BPSK	1@1	25.43	29.23	0.8375
78	30	20	647334	3710.01	DFT-s-OFDM QPSK	1@1	25.35	29.15	0.8222
78	30	20	647334	3710.01	DFT-s-OFDM 16 QAM	1@1	24.52	28.32	0.6792
78	30	20	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.4	29.2	0.8318
78	30	20	650000	3750	DFT-s-OFDM QPSK	1@1	25.39	29.19	0.8299
78	30	20	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.4	28.2	0.6607
78	30	20	652666	3789.99	DFT-s-OFDM PI/2 BPSK	1@1	25.24	29.04	0.8017
78	30	20	652666	3789.99	DFT-s-OFDM QPSK	1@1	25.22	29.02	0.7980
78	30	20	652666	3789.99	DFT-s-OFDM 16 QAM	1@1	24.33	28.13	0.6501
78	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	25.51	29.31	0.8531
78	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	25.48	29.28	0.8472
78	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	24.63	28.43	0.6966
78	30	30	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.63	29.43	0.8770
78	30	30	650000	3750	DFT-s-OFDM QPSK	1@1	25.46	29.26	0.8433
78	30	30	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.79	28.59	0.7228
78	30	30	652332	3784.98	DFT-s-OFDM PI/2 BPSK	1@1	25.16	28.96	0.7870
78	30	30	652332	3784.98	DFT-s-OFDM QPSK	1@1	25.1	28.9	0.7762
78	30	30	652332	3784.98	DFT-s-OFDM 16 QAM	1@1	24.1	27.9	0.6166
78	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	25.37	29.17	0.8260
78	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	25.46	29.26	0.8433
78	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	24.76	28.56	0.7178
78	30	40	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.43	29.23	0.8375
78	30	40	650000	3750	DFT-s-OFDM QPSK	1@1	25.46	29.26	0.8433
78	30	40	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.69	28.49	0.7063
78	30	40	652000	3780	DFT-s-OFDM PI/2 BPSK	1@1	24.37	28.17	0.6561
78	30	40	652000	3780	DFT-s-OFDM QPSK	1@1	24.28	28.08	0.6427
78	30	40	652000	3780	DFT-s-OFDM 16 QAM	1@1	23.41	27.21	0.5260
78	30	50	648334	3725.01	DFT-s-OFDM PI/2 BPSK	1@1	25.26	29.06	0.8054
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@1	25.19	28.99	0.7925
78	30	50	648334	3725.01	DFT-s-OFDM 16 QAM	1@1	24.3	28.1	0.6457
78	30	50	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.33	29.13	0.8185
78	30	50	650000	3750	DFT-s-OFDM QPSK	1@1	25.34	29.14	0.8204
78	30	50	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.36	28.16	0.6546
78	30	50	651666	3774.99	DFT-s-OFDM PI/2 BPSK	1@1	23.95	27.75	0.5957
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@1	23.94	27.74	0.5943
78	30	50	651666	3774.99	DFT-s-OFDM 16 QAM	1@1	22.98	26.78	0.4764
78	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	25.11	28.91	0.7780
78	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@1	25.11	28.91	0.7780
78	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	24.23	28.03	0.6353
78	30	60	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.31	29.11	0.8147
78	30	60	650000	3750	DFT-s-OFDM QPSK	1@1	25.26	29.06	0.8054
78	30	60	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.42	28.22	0.6637
78	30	60	651332	3769.98	DFT-s-OFDM PI/2 BPSK	1@1	24.82	28.62	0.7278
78	30	60	651332	3769.98	DFT-s-OFDM QPSK	1@1	24.81	28.61	0.7261
78	30	60	651332	3769.98	DFT-s-OFDM 16 QAM	1@1	23.88	27.68	0.5861
78	30	70	649000	3735	DFT-s-OFDM PI/2 BPSK	1@1	25.2	29	0.7943
78	30	70	649000	3735	DFT-s-OFDM QPSK	1@1	25.13	28.93	0.7816



78	30	70	649000	3735	DFT-s-OFDM 16 QAM	1@1	24.21	28.01	0.6324
78	30	70	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.31	29.11	0.8147
78	30	70	650000	3750	DFT-s-OFDM QPSK	1@1	25.25	29.05	0.8035
78	30	70	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.38	28.18	0.6577
78	30	70	651000	3765	DFT-s-OFDM PI/2 BPSK	1@1	25.08	28.88	0.7727
78	30	70	651000	3765	DFT-s-OFDM QPSK	1@1	25.02	28.82	0.7621
78	30	70	651000	3765	DFT-s-OFDM 16 QAM	1@1	24.15	27.95	0.6237
78	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	25.1	28.9	0.7762
78	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	25.08	28.88	0.7727
78	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	24.16	27.96	0.6252
78	30	80	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.46	29.26	0.8433
78	30	80	650000	3750	DFT-s-OFDM QPSK	1@1	25.4	29.2	0.8318
78	30	80	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.52	28.32	0.6792
78	30	80	650666	3759.99	DFT-s-OFDM PI/2 BPSK	1@1	25.21	29.01	0.7962
78	30	80	650666	3759.99	DFT-s-OFDM QPSK	1@1	25.15	28.95	0.7852
78	30	80	650666	3759.99	DFT-s-OFDM 16 QAM	1@1	24.3	28.1	0.6457
78	30	90	649668	3745.02	DFT-s-OFDM PI/2 BPSK	1@1	24.34	28.14	0.6516
78	30	90	649668	3745.02	DFT-s-OFDM QPSK	1@1	24.27	28.07	0.6412
78	30	90	649668	3745.02	DFT-s-OFDM 16 QAM	1@1	23.37	27.17	0.5212
78	30	90	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.42	29.22	0.8356
78	30	90	650000	3750	DFT-s-OFDM QPSK	1@1	25.41	29.21	0.8337
78	30	90	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.51	28.31	0.6776
78	30	90	650332	3754.98	DFT-s-OFDM PI/2 BPSK	1@1	25.3	29.1	0.8128
78	30	90	650332	3754.98	DFT-s-OFDM QPSK	1@1	25.43	29.23	0.8375
78	30	90	650332	3754.98	DFT-s-OFDM 16 QAM	1@1	24.34	28.14	0.6516
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	24.88	28.68	0.7379
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	25.51	29.31	0.8531
78	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	25.47	29.27	0.8453
78	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	24.73	28.53	0.7129
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	25.49	29.29	0.8492
78	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	25.46	29.26	0.8433
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	23.79	27.59	0.5741
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	24.61	28.41	0.6934
78	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	24.56	28.36	0.6855
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	22.28	26.08	0.4055
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	22.98	26.78	0.4764
78	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	23.01	26.81	0.4797
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	20.27	24.07	0.2553
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	20.81	24.61	0.2891
78	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	20.75	24.55	0.2851
78	30	100	650000	3750	CP-OFDM QPSK	137@68	23.24	27.04	0.5058
78	30	100	650000	3750	CP-OFDM QPSK	1@1	23.96	27.76	0.5970
78	30	100	650000	3750	CP-OFDM QPSK	1@271	24	27.8	0.6026



5G NR n78 UL MIMO

NR Band	SCS	Band	Width	Arfcn	Freq(MHz)	Modulation	RB	ANT0 Power(dBm)	ANT2 Power(dBm)	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	20	647334	3710.01	CP-OFDM QPSK	1@1		20.93	21.15	24.05	27.85	0.6098
78	30	20	647334	3710.01	CP-OFDM 16 QAM	1@1		20.36	20.56	23.47	27.27	0.5335
78	30	20	647334	3710.01	CP-OFDM 64 QAM	1@1		19.22	19.31	22.28	26.08	0.4051
78	30	20	650000	3750	CP-OFDM QPSK	1@1		20.86	21.33	24.11	27.91	0.6183
78	30	20	650000	3750	CP-OFDM 16 QAM	1@1		20.54	20.88	23.72	27.52	0.5654
78	30	20	650000	3750	CP-OFDM 64 QAM	1@1		19.08	19.54	22.33	26.13	0.4099
78	30	20	652666	3789.99	CP-OFDM QPSK	1@1		20.86	21.38	24.14	27.94	0.6220
78	30	20	652666	3789.99	CP-OFDM 16 QAM	1@1		20.32	20.74	23.55	27.35	0.5427
78	30	20	652666	3789.99	CP-OFDM 64 QAM	1@1		19.02	19.33	22.19	25.99	0.3970
78	30	30	647668	3715.02	CP-OFDM QPSK	1@1		21	21.21	24.12	27.92	0.6190
78	30	30	647668	3715.02	CP-OFDM 16 QAM	1@1		20.45	20.61	23.54	27.34	0.5421
78	30	30	647668	3715.02	CP-OFDM 64 QAM	1@1		19.15	19.31	22.24	26.04	0.4019
78	30	30	650000	3750	CP-OFDM QPSK	1@1		20.89	21.42	24.17	27.97	0.6271
78	30	30	650000	3750	CP-OFDM 16 QAM	1@1		20.53	20.69	23.62	27.42	0.5522
78	30	30	650000	3750	CP-OFDM 64 QAM	1@1		19.22	19.59	22.42	26.22	0.4187
78	30	30	652332	3784.98	CP-OFDM QPSK	1@1		20.65	21.36	24.03	27.83	0.6067
78	30	30	652332	3784.98	CP-OFDM 16 QAM	1@1		19.88	20.89	23.42	27.22	0.5278
78	30	30	652332	3784.98	CP-OFDM 64 QAM	1@1		18.64	19.62	22.17	25.97	0.3952
78	30	40	648000	3720	CP-OFDM QPSK	1@1		21.07	21.31	24.20	28.00	0.6312
78	30	40	648000	3720	CP-OFDM 16 QAM	1@1		20.53	20.6	23.58	27.38	0.5464
78	30	40	648000	3720	CP-OFDM 64 QAM	1@1		19.32	19.27	22.31	26.11	0.4079
78	30	40	650000	3750	CP-OFDM QPSK	1@1		21.05	21.42	24.25	28.05	0.6382
78	30	40	650000	3750	CP-OFDM 16 QAM	1@1		20.45	20.97	23.73	27.53	0.5660
78	30	40	650000	3750	CP-OFDM 64 QAM	1@1		19.16	19.34	22.26	26.06	0.4038
78	30	40	652000	3780	CP-OFDM QPSK	1@1		19.93	21.56	23.83	27.63	0.5796
78	30	40	652000	3780	CP-OFDM 16 QAM	1@1		19.31	20.83	23.15	26.95	0.4950
78	30	40	652000	3780	CP-OFDM 64 QAM	1@1		18.21	19.34	21.82	25.62	0.3649
78	30	50	648334	3725.01	CP-OFDM QPSK	1@1		20.79	21	23.91	27.71	0.5897
78	30	50	648334	3725.01	CP-OFDM 16 QAM	1@1		20.22	20.41	23.33	27.13	0.5160
78	30	50	648334	3725.01	CP-OFDM 64 QAM	1@1		19.05	19.23	22.15	25.95	0.3937
78	30	50	650000	3750	CP-OFDM QPSK	1@1		20.89	21.25	24.08	27.88	0.6143
78	30	50	650000	3750	CP-OFDM 16 QAM	1@1		20.38	20.54	23.47	27.27	0.5335
78	30	50	650000	3750	CP-OFDM 64 QAM	1@1		19.12	19.33	22.24	26.04	0.4015
78	30	50	651666	3774.99	CP-OFDM QPSK	1@1		19.43	21.16	23.39	27.19	0.5237
78	30	50	651666	3774.99	CP-OFDM 16 QAM	1@1		18.86	20.48	22.76	26.56	0.4524
78	30	50	651666	3774.99	CP-OFDM 64 QAM	1@1		18.02	19.31	21.72	25.52	0.3567
78	30	60	648668	3730.02	CP-OFDM QPSK	1@1		20.69	21.03	23.87	27.67	0.5853
78	30	60	648668	3730.02	CP-OFDM 16 QAM	1@1		20.02	20.31	23.18	26.98	0.4986
78	30	60	648668	3730.02	CP-OFDM 64 QAM	1@1		19.01	19.12	22.08	25.88	0.3869
78	30	60	650000	3750	CP-OFDM QPSK	1@1		20.95	21.16	24.07	27.87	0.6119
78	30	60	650000	3750	CP-OFDM 16 QAM	1@1		20.32	20.43	23.39	27.19	0.5231
78	30	60	650000	3750	CP-OFDM 64 QAM	1@1		19.13	19.31	22.23	26.03	0.4010
78	30	60	651332	3769.98	CP-OFDM QPSK	1@1		20.3	21.25	23.81	27.61	0.5769
78	30	60	651332	3769.98	CP-OFDM 16 QAM	1@1		19.59	20.53	23.10	26.90	0.4893
78	30	60	651332	3769.98	CP-OFDM 64 QAM	1@1		18.62	19.33	22.00	25.80	0.3802
78	30	70	649000	3735	CP-OFDM QPSK	1@1		20.75	20.89	23.83	27.63	0.5795
78	30	70	649000	3735	CP-OFDM 16 QAM	1@1		20.15	20.22	23.20	27.00	0.5007



78	30	70	649000	3735	CP-OFDM 64 QAM	1@1	19.24	19.11	22.19	25.99	0.3968
78	30	70	650000	3750	CP-OFDM QPSK	1@1	20.95	20.97	23.97	27.77	0.5985
78	30	70	650000	3750	CP-OFDM 16 QAM	1@1	20.19	20.35	23.28	27.08	0.5106
78	30	70	650000	3750	CP-OFDM 64 QAM	1@1	19.05	19.31	22.19	25.99	0.3974
78	30	70	651000	3765	CP-OFDM QPSK	1@1	21.22	21.14	24.19	27.99	0.6296
78	30	70	651000	3765	CP-OFDM 16 QAM	1@1	20.96	20.5	23.75	27.55	0.5684
78	30	70	651000	3765	CP-OFDM 64 QAM	1@1	19.62	19.34	22.49	26.29	0.4258
78	30	80	649334	3740.01	CP-OFDM QPSK	1@1	20.68	20.83	23.77	27.57	0.5709
78	30	80	649334	3740.01	CP-OFDM 16 QAM	1@1	20.08	20.15	23.13	26.93	0.4927
78	30	80	649334	3740.01	CP-OFDM 64 QAM	1@1	19.01	19.03	22.03	25.83	0.3829
78	30	80	650000	3750	CP-OFDM QPSK	1@1	20.91	20.97	23.95	27.75	0.5957
78	30	80	650000	3750	CP-OFDM 16 QAM	1@1	20.19	20.24	23.23	27.03	0.5041
78	30	80	650000	3750	CP-OFDM 64 QAM	1@1	19.05	19.16	22.12	25.92	0.3904
78	30	80	650666	3759.99	CP-OFDM QPSK	1@1	20.79	21.04	23.93	27.73	0.5925
78	30	80	650666	3759.99	CP-OFDM 16 QAM	1@1	20.05	20.29	23.18	26.98	0.4991
78	30	80	650666	3759.99	CP-OFDM 64 QAM	1@1	20.83	19.16	23.09	26.89	0.4881
78	30	90	649668	3745.02	CP-OFDM QPSK	1@1	20.89	21.04	23.98	27.78	0.5992
78	30	90	649668	3745.02	CP-OFDM 16 QAM	1@1	21.26	20.47	23.89	27.69	0.5879
78	30	90	649668	3745.02	CP-OFDM 64 QAM	1@1	20.05	19.17	22.64	26.44	0.4408
78	30	90	650000	3750	CP-OFDM QPSK	1@1	20.94	20.88	23.92	27.72	0.5916
78	30	90	650000	3750	CP-OFDM 16 QAM	1@1	20.21	20.14	23.19	26.99	0.4995
78	30	90	650000	3750	CP-OFDM 64 QAM	1@1	18.86	19.33	22.11	25.91	0.3901
78	30	90	650332	3754.98	CP-OFDM QPSK	1@1	20.93	20.87	23.91	27.71	0.5903
78	30	90	650332	3754.98	CP-OFDM 16 QAM	1@1	20.14	20.17	23.17	26.97	0.4972
78	30	90	650332	3754.98	CP-OFDM 64 QAM	1@1	18.96	19.05	22.02	25.82	0.3816
78	30	100	650000	3750	CP-OFDM QPSK	137@68	20.86	21.02	23.95	27.75	0.5958
78	30	100	650000	3750	CP-OFDM QPSK	1@1	20.91	20.87	23.90	27.70	0.5889
78	30	100	650000	3750	CP-OFDM QPSK	1@271	20.91	20.94	23.94	27.74	0.5937
78	30	100	650000	3750	CP-OFDM 16 QAM	137@68	19.96	20.53	23.26	27.06	0.5087
78	30	100	650000	3750	CP-OFDM 16 QAM	1@1	20.34	20.21	23.29	27.09	0.5112
78	30	100	650000	3750	CP-OFDM 16 QAM	1@271	20.29	20.41	23.36	27.16	0.5201
78	30	100	650000	3750	CP-OFDM 64 QAM	137@68	18.69	18.98	21.85	25.65	0.3671
78	30	100	650000	3750	CP-OFDM 64 QAM	1@1	19.04	18.89	21.98	25.78	0.3781
78	30	100	650000	3750	CP-OFDM 64 QAM	1@271	19.07	19.11	22.10	25.90	0.3891
78	30	100	650000	3750	CP-OFDM 256 QAM	137@68	18.35	19.03	21.71	25.51	0.3559
78	30	100	650000	3750	CP-OFDM 256 QAM	1@1	15.99	16.04	19.03	22.83	0.1917
78	30	100	650000	3750	CP-OFDM 256 QAM	1@271	16.01	16.1	19.07	22.87	0.1934



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake zhou	Temperature :	23~25°C
		Relative Humidity :	53~58%

n77 UL MIMO / NR 100MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-57.18	-13	-44.18	-67.39	3.03	13.24	H
	11376	-55.73	-13	-42.73	-65.18	3.56	13.01	H
	15180	-59.76	-13	-46.76	-69.28	3.92	13.44	H
	7584	-55.74	-13	-42.74	-65.95	3.03	13.24	V
	11376	-49.54	-13	-36.54	-58.99	3.56	13.01	V
	15180	-59.57	-13	-46.57	-69.09	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_30A_n77A / LTE 10MHz + NR 100MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-61.24	-13	-48.24	-71.45	3.03	13.24	H
	11376	-55.64	-13	-42.64	-65.09	3.56	13.01	H
	15180	-59.98	-13	-46.98	-69.50	3.92	13.44	H
	7584	-60.69	-13	-47.69	-70.90	3.03	13.24	V
	11376	-55.00	-13	-42.00	-64.45	3.56	13.01	V
	15180	-60.22	-13	-47.22	-69.74	3.92	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.