FCC RF Test Report

APPLICANT	:	Quectel Wireless Solutions Co., Ltd.
EQUIPMENT	:	5G Sub-6 GHz LGA Module
BRAND NAME	:	Quectel
MODEL NAME	:	RG500L-LA
FCC ID	:	XMR2023RG500LLA
STANDARD	:	47 CFR Part 2, 96
CLASSIFICATION	:	Citizens Band End User Devices (CBE)
EQUIPMENT TYPE	:	End User Equipment
TEST DATE(S)	:	May 18, 2024 ~ May 20, 2024

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 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

ACCREDITED Cert #5145.02

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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History of this test report

Report No.	Version	Description	Issued Date
FG2D0201-02C	01	Initial issue of report	May 31, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
3.3	§96.41	Maximum E.I.R.P	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 20.03 dB at 14315.000 MHz

Note: This is a variant report for RG500L-LA. The change note could be referred to the RG500L-LA_Operational Description of Product Equality Declaration which is exhibit separately. According to the change, only the related test cases were verified from original spot check report 2D0201-01 (Reference report FG2D0201K, FCC ID: XMR2023RG500LNA).

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/manufacturer 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

Quectel Wireless Solutions Co., Ltd.
Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

1.2 Manufacturer

Quectel Wireless Solutions Co., Ltd.
Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G Sub-6 GHz LGA Module
Brand Name	Quectel
Model Name	RG500L-LA
FCC ID	XMR2023RG500LLA
Tx/Rx Frequency	5G NR n78: 3550 MHz ~ 3700 MHz
SCS	30kHz
Bandwidth	n78: 10 / 15 / 20 / 25 / 30 / 40 / 50 / 60 / 80 / 90 / 100MHz
Antenna Gain	Ant.0: n78: 6.5 dBi Ant.6: n78: 4.4 dBi
Type of Modulation	DFT-s-OFDM (PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM) CP-OFDM (QPSK / 16QAM / 64QAM / 256QAM)
IMEI Code	863221060013925
HW Version	R1.0
SW Version	RG500LLA00AAR01A05E8_OCPU
EUT Stage	Identical Prototype

Remark:

1. 5G NR n78 support UL MIMO mode for Antenna port (0+6).
2. 5G NR n78 SISO mode only support Antenna port 0, not support Antenna port 6.
3. 5G NR n78 UL_MIMO mode only supports CP-OFDM Modulation, the MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.
4. The device supports HPUE mode for 5G NR n78 SISO mode.
5. The EN-DC mode combination could be referred to the product spec.

1.4 Maximum Conducted Power

5G NR n78		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	3555.00~3694.98	0.0411	-	0.0428	-
15	3557.52~3692.49	0.0416	-	0.0432	-
20	3560.01~3690.00	0.0418	-	0.0429	-
25	3562.5~3687.48	0.0382	-	0.0399	-
30	3565.02~3684.99	0.0373	-	0.0385	-
40	3570.00~3679.98	0.0366	-	0.0384	-
50	3575.01~3675.00	0.0389	-	0.0406	-
60	3580.02~3669.99	0.0377	-	0.0394	-
80	3590.01~3660.00	0.0376	-	0.0381	-
90	3595.02~3654.99	0.0363	-	0.0374	-
100	3600.00~3649.98	0.0408	-	0.0406	-

5G NR n78 UL MIMO		QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
10	3555.00~3694.98	0.0444	-	0.0441	-
15	3557.52~3692.49	0.0445	-	0.0442	-
20	3560.01~3690.00	0.0443	-	0.0445	-
25	3562.5~3687.48	0.0444	-	0.0440	-
30	3565.02~3684.99	0.0443	-	0.0432	-
40	3570.00~3679.98	0.0443	-	0.0441	-
50	3575.01~3675.00	0.0442	-	0.0431	-
60	3580.02~3669.99	0.0419	-	0.0420	-
80	3590.01~3660.00	0.0400	-	0.0430	-
90	3595.02~3654.99	0.0428	-	0.0432	-
100	3600.00~3649.98	0.0444	-	0.0444	-

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

1.5 Testing Site

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 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-KS TH01-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24al

1.7 Applied Standards

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

- ANSI C63.26-2015
- 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

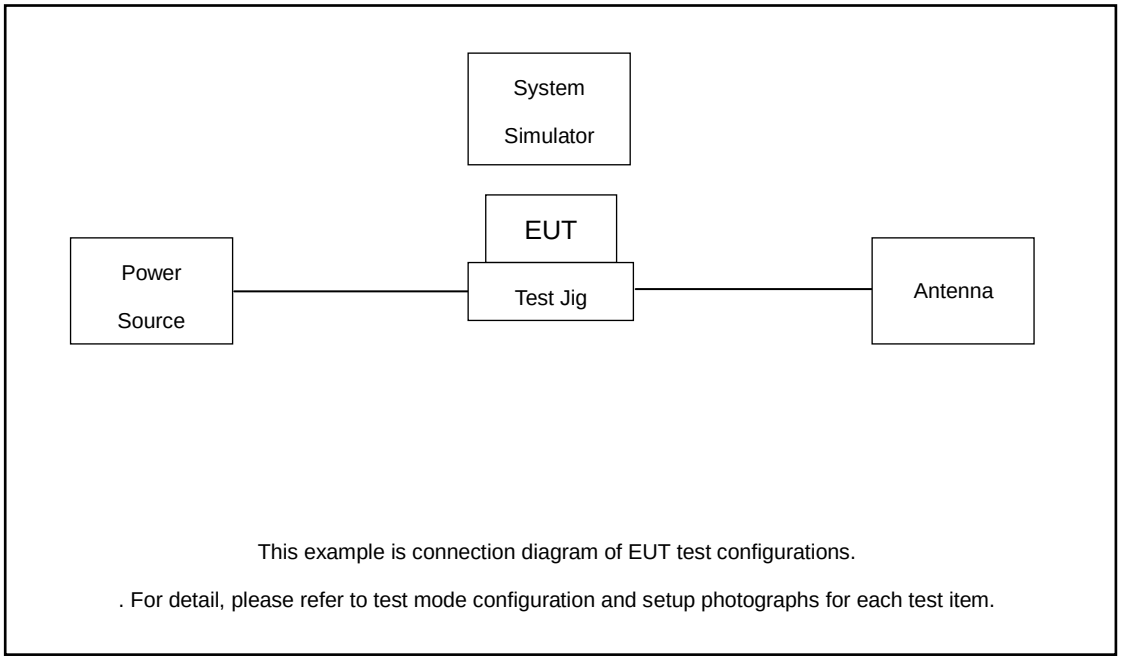
2.1 Test Mode

Antenna port conducted and radiated test items listed below 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 (Y plane) were recorded in this report.

Test Items	5G NR	Bandwidth (MHz)												Modulation					RB #		Test Channel		
		10	15	20	25	30	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16 QAM	64 QAM	256 QAM	1	Full	L	M	H
Max. Output Power	n78	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v
E.I.R.P	n78	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n78	Worst Case																			v	v	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. Based on engineering evaluation, only the worst modulations test results are shown in the report. 5. Frequency Stability : Normal Voltage = 3.8V ; Low Voltage =3.3V.; High Voltage =4.3V.																						

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	Base Station	Anritsu	MT8820/8821	N/A	N/A	Unshielded, 1.8 m
3.	Test jig	N/A	N/A	N/A	N/A	N/A
4.	Antenna	N/A	N/A	N/A	N/A	N/A
5.	Adapter	N/A	N/A	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

5G n78 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	640000	641666	643332
	Frequency	3600	3624.99	3649.98
90	Channel	639668	641666	643666
	Frequency	3595.02	3624.99	3654.99
80	Channel	639334	641666	644000
	Frequency	3590.01	3624.99	3660
60	Channel	638668	641666	644666
	Frequency	3580.02	3624.99	3669.99
50	Channel	638334	641666	645000
	Frequency	3575.01	3624.99	3675
40	Channel	638000	641666	645332
	Frequency	3570	3624.99	3679.98
30	Channel	637668	641666	645666
	Frequency	3565.02	3624.99	3684.99
25	Channel	637500	641666	645832
	Frequency	3562.5	3624.99	3687.48
20	Channel	637334	641666	646000
	Frequency	3560.01	3624.99	3690
15	Channel	637168	641666	646166
	Frequency	3557.52	3624.99	3692.49
10	Channel	637000	641666	646332
	Frequency	3555	3624.99	3694.98

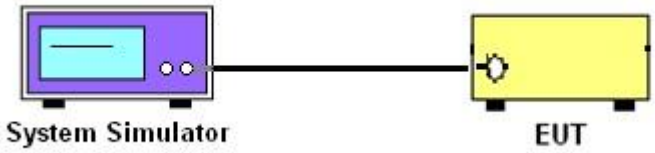
3 Conducted Test Items

3.1 Measuring Instruments

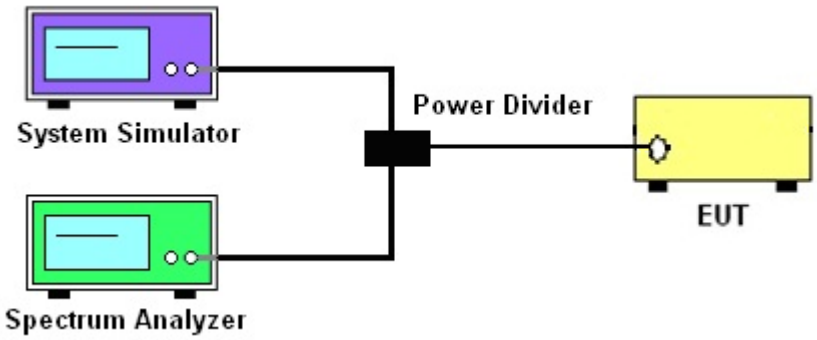
See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 EIRP



3.1.4 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power 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.

3.2.2 Test Procedures

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

3.3 EIRP

3.3.1 Description of the EIRP Measurement

EIRP limits for CBRS equipment as below table:

Device		Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
Applied	**End User Device**	23	n/a
☐	**Category A CBSD**	30	20
☐	**Category B CBSD**	47	37

Remark: The worst case EIRP shown in this section is found with NR operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for n48 (i.e. 10, 15, 20MHz…)

3.3.2 Test Procedures for EIRP

1. Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)

2. Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)

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

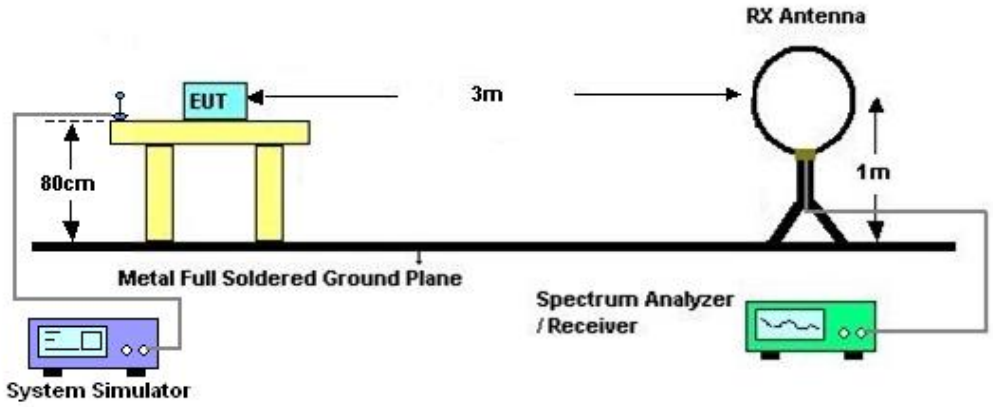
4 Radiated Test Items

4.1 Measuring Instruments

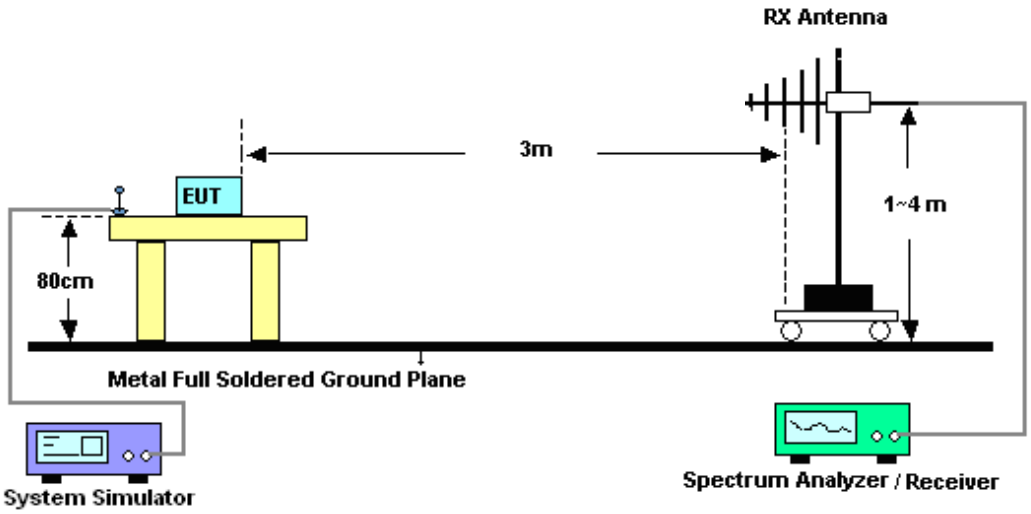
See list of measuring instruments of this test report.

4.2 Test Setup

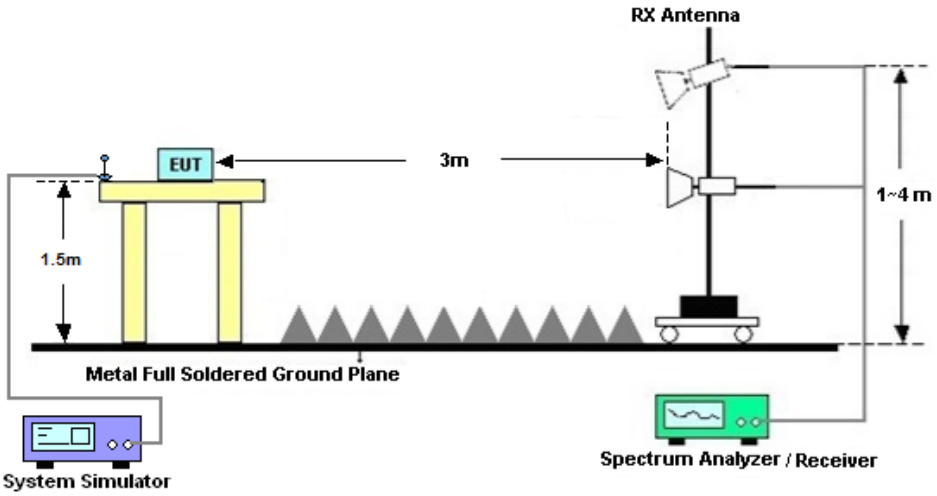
4.2.1 For radiated test below 30MHz



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 Measurement

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 -40dBm / MHz.

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

4.4.2 Test Procedures

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.
   Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
   The limit line is −40dBm/MHz

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. 11, 2023	May 20, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	May 20, 2024	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 06, 2023	May 20, 2024	Jul. 05, 2024	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 10, 2023	May 18, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	59913	30MHz-1GHz	Aug. 19, 2023	May 18, 2024	Aug. 18, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00251694	1GHz~18GHz	Jul. 12, 2023	May 18, 2024	Jul. 11, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2024	May 18, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380827	9KHz-1GHz	Jul. 06, 2023	May 18, 2024	Jul. 05, 2024	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2024	May 18, 2024	Jan. 04, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2023	May 18, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
Amplifier	Agilent	8449B	3008A02370	1Ghz-18Ghz	Oct. 10, 2023	May 18, 2024	Oct. 09, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	May 18, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	May 18, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	May 18, 2024	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required.

6 Uncertainty of Evaluation

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.46 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.82 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.56 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.54 dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Simle Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

5G NR n78

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	135@67	16.1	22.6	0.1820
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	1@1	15.58	22.08	0.1614
78	30	100	640000	3600	DFT-s-OFDM PI/2 BPSK	1@271	15.3	21.8	0.1514
78	30	100	640000	3600	DFT-s-OFDM QPSK	135@67	16.08	22.58	0.1811
78	30	100	640000	3600	DFT-s-OFDM QPSK	1@1	15.61	22.11	0.1626
78	30	100	640000	3600	DFT-s-OFDM QPSK	1@271	15.31	21.81	0.1517
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	135@67	16.08	22.58	0.1811
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	1@1	15.58	22.08	0.1614
78	30	100	640000	3600	DFT-s-OFDM 16 QAM	1@271	15.28	21.78	0.1507
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	135@67	15.6	22.1	0.1622
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	1@1	15.22	21.72	0.1486
78	30	100	640000	3600	DFT-s-OFDM 64 QAM	1@271	14.95	21.45	0.1396
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	135@67	13.62	20.12	0.1028
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	1@1	13.33	19.83	0.0962
78	30	100	640000	3600	DFT-s-OFDM 256 QAM	1@271	13.02	19.52	0.0895
78	30	100	640000	3600	CP-OFDM QPSK	137@68	16.11	22.61	0.1824
78	30	100	640000	3600	CP-OFDM QPSK	1@1	15.46	21.96	0.1570
78	30	100	640000	3600	CP-OFDM QPSK	1@271	15.22	21.72	0.1486
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	135@67	16.02	22.52	0.1786
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.53	22.03	0.1596
78	30	100	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@271	15.35	21.85	0.1531
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	135@67	15.99	22.49	0.1774
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.57	22.07	0.1611
78	30	100	641666	3624.99	DFT-s-OFDM QPSK	1@271	15.29	21.79	0.1510
78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	135@67	16.09	22.59	0.1816
78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.32	21.82	0.1521
78	30	100	641666	3624.99	DFT-s-OFDM 16 QAM	1@271	15.11	21.61	0.1449
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	135@67	15.55	22.05	0.1603
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	1@1	15.05	21.55	0.1429
78	30	100	641666	3624.99	DFT-s-OFDM 64 QAM	1@271	14.92	21.42	0.1387
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	135@67	13.58	20.08	0.1019
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	1@1	13.29	19.79	0.0953
78	30	100	641666	3624.99	DFT-s-OFDM 256 QAM	1@271	13.06	19.56	0.0904
78	30	100	641666	3624.99	CP-OFDM QPSK	137@68	16.02	22.52	0.1786

78	30	100	641666	3624.99	CP-OFDM QPSK	1@1	15.4	21.9	0.1549
78	30	100	641666	3624.99	CP-OFDM QPSK	1@271	15.44	21.94	0.1563
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	135@67	16.07	22.57	0.1807
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	1@1	15.51	22.01	0.1589
78	30	100	643332	3649.98	DFT-s-OFDM PI/2 BPSK	1@271	15.33	21.83	0.1524
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	135@67	16.06	22.56	0.1803
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	1@1	15.53	22.03	0.1596
78	30	100	643332	3649.98	DFT-s-OFDM QPSK	1@271	15.34	21.84	0.1528
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	135@67	16.09	22.59	0.1816
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	1@1	15.33	21.83	0.1524
78	30	100	643332	3649.98	DFT-s-OFDM 16 QAM	1@271	15.13	21.63	0.1455
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	135@67	15.58	22.08	0.1614
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	1@1	15.14	21.64	0.1459
78	30	100	643332	3649.98	DFT-s-OFDM 64 QAM	1@271	14.96	21.46	0.1400
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	135@67	13.61	20.11	0.1026
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	1@1	13.58	20.08	0.1019
78	30	100	643332	3649.98	DFT-s-OFDM 256 QAM	1@271	13.48	19.98	0.0995
78	30	100	643332	3649.98	CP-OFDM QPSK	137@68	16.06	22.56	0.1803
78	30	100	643332	3649.98	CP-OFDM QPSK	1@1	15.38	21.88	0.1542
78	30	100	643332	3649.98	CP-OFDM QPSK	1@271	15.33	21.83	0.1524
78	30	10	637000	3555	DFT-s-OFDM PI/2 BPSK	1@1	16.14	22.64	0.1837
78	30	10	637000	3555	DFT-s-OFDM QPSK	1@1	16.13	22.63	0.1832
78	30	10	637000	3555	DFT-s-OFDM 16 QAM	1@1	16.08	22.58	0.1811
78	30	10	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	16.09	22.59	0.1816
78	30	10	641666	3624.99	DFT-s-OFDM QPSK	1@1	16.02	22.52	0.1786
78	30	10	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	16.27	22.77	0.1892
78	30	10	646332	3694.98	DFT-s-OFDM PI/2 BPSK	1@1	16.13	22.63	0.1832
78	30	10	646332	3694.98	DFT-s-OFDM QPSK	1@1	16.13	22.63	0.1832
78	30	10	646332	3694.98	DFT-s-OFDM 16 QAM	1@1	16.31	22.81	0.1910
78	30	15	637168	3557.52	DFT-s-OFDM PI/2 BPSK	1@1	16.15	22.65	0.1841
78	30	15	637168	3557.52	DFT-s-OFDM QPSK	1@1	16.14	22.64	0.1837
78	30	15	637168	3557.52	DFT-s-OFDM 16 QAM	1@1	16.27	22.77	0.1892
78	30	15	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	16.05	22.55	0.1799
78	30	15	641666	3624.99	DFT-s-OFDM QPSK	1@1	16.1	22.6	0.1820
78	30	15	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	16.22	22.72	0.1871
78	30	15	646166	3692.49	DFT-s-OFDM PI/2 BPSK	1@1	16.19	22.69	0.1858
78	30	15	646166	3692.49	DFT-s-OFDM QPSK	1@1	16.17	22.67	0.1849
78	30	15	646166	3692.49	DFT-s-OFDM 16 QAM	1@1	16.35	22.85	0.1928
78	30	20	637334	3560.01	DFT-s-OFDM PI/2 BPSK	1@1	16.18	22.68	0.1854
78	30	20	637334	3560.01	DFT-s-OFDM QPSK	1@1	16.21	22.71	0.1866
78	30	20	637334	3560.01	DFT-s-OFDM 16 QAM	1@1	16.32	22.82	0.1914
78	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	16.02	22.52	0.1786
78	30	20	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.99	22.49	0.1774
78	30	20	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.77	22.27	0.1687
78	30	20	646000	3690	DFT-s-OFDM PI/2 BPSK	1@1	15.86	22.36	0.1722

78	30	20	646000	3690	DFT-s-OFDM QPSK	1@1	15.85	22.35	0.1718
78	30	20	646000	3690	DFT-s-OFDM 16 QAM	1@1	16.03	22.53	0.1791
78	30	25	647500	3562.5	DFT-s-OFDM PI/2 BPSK	1@1	15.8	22.3	0.1698
78	30	25	647500	3562.5	DFT-s-OFDM QPSK	1@1	15.82	22.32	0.1706
78	30	25	647500	3562.5	DFT-s-OFDM 16 QAM	1@1	16.01	22.51	0.1782
78	30	25	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.71	22.21	0.1663
78	30	25	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.72	22.22	0.1667
78	30	25	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.82	22.32	0.1706
78	30	25	645833	3687.495	DFT-s-OFDM PI/2 BPSK	1@1	15.81	22.31	0.1702
78	30	25	645833	3687.495	DFT-s-OFDM QPSK	1@1	15.81	22.31	0.1702
78	30	25	645833	3687.495	DFT-s-OFDM 16 QAM	1@1	15.96	22.46	0.1762
78	30	30	637668	3565.02	DFT-s-OFDM PI/2 BPSK	1@1	15.72	22.22	0.1667
78	30	30	637668	3565.02	DFT-s-OFDM QPSK	1@1	15.7	22.2	0.1660
78	30	30	637668	3565.02	DFT-s-OFDM 16 QAM	1@1	15.86	22.36	0.1722
78	30	30	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.61	22.11	0.1626
78	30	30	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.62	22.12	0.1629
78	30	30	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.78	22.28	0.1690
78	30	30	645666	3684.99	DFT-s-OFDM PI/2 BPSK	1@1	15.66	22.16	0.1644
78	30	30	645666	3684.99	DFT-s-OFDM QPSK	1@1	15.65	22.15	0.1641
78	30	30	645666	3684.99	DFT-s-OFDM 16 QAM	1@1	15.83	22.33	0.1710
78	30	40	638000	3570	DFT-s-OFDM PI/2 BPSK	1@1	15.64	22.14	0.1637
78	30	40	638000	3570	DFT-s-OFDM QPSK	1@1	15.58	22.08	0.1614
78	30	40	638000	3570	DFT-s-OFDM 16 QAM	1@1	15.84	22.34	0.1714
78	30	40	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.56	22.06	0.1607
78	30	40	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.59	22.09	0.1618
78	30	40	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.66	22.16	0.1644
78	30	40	645332	3679.98	DFT-s-OFDM PI/2 BPSK	1@1	15.56	22.06	0.1607
78	30	40	645332	3679.98	DFT-s-OFDM QPSK	1@1	15.54	22.04	0.1600
78	30	40	645332	3679.98	DFT-s-OFDM 16 QAM	1@1	15.71	22.21	0.1663
78	30	50	638334	3575.01	DFT-s-OFDM PI/2 BPSK	1@1	15.87	22.37	0.1726
78	30	50	638334	3575.01	DFT-s-OFDM QPSK	1@1	15.9	22.4	0.1738
78	30	50	638334	3575.01	DFT-s-OFDM 16 QAM	1@1	16.09	22.59	0.1816
78	30	50	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.86	22.36	0.1722
78	30	50	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.86	22.36	0.1722
78	30	50	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.99	22.49	0.1774
78	30	50	645000	3675	DFT-s-OFDM PI/2 BPSK	1@1	15.8	22.3	0.1698
78	30	50	645000	3675	DFT-s-OFDM QPSK	1@1	15.78	22.28	0.1690
78	30	50	645000	3675	DFT-s-OFDM 16 QAM	1@1	15.96	22.46	0.1762
78	30	60	638668	3580.02	DFT-s-OFDM PI/2 BPSK	1@1	15.76	22.26	0.1683
78	30	60	638668	3580.02	DFT-s-OFDM QPSK	1@1	15.74	22.24	0.1675
78	30	60	638668	3580.02	DFT-s-OFDM 16 QAM	1@1	15.94	22.44	0.1754
78	30	60	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.74	22.24	0.1675
78	30	60	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.71	22.21	0.1663
78	30	60	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.96	22.46	0.1762
78	30	60	644666	3669.99	DFT-s-OFDM PI/2 BPSK	1@1	15.57	22.07	0.1611

78	30	60	644666	3669.99	DFT-s-OFDM QPSK	1@1	15.61	22.11	0.1626
78	30	60	644666	3669.99	DFT-s-OFDM 16 QAM	1@1	15.78	22.28	0.1690
78	30	80	639334	3590.01	DFT-s-OFDM PI/2 BPSK	1@1	15.71	22.21	0.1663
78	30	80	639334	3590.01	DFT-s-OFDM QPSK	1@1	15.64	22.14	0.1637
78	30	80	639334	3590.01	DFT-s-OFDM 16 QAM	1@1	15.81	22.31	0.1702
78	30	80	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.67	22.17	0.1648
78	30	80	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.44	21.94	0.1563
78	30	80	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.74	22.24	0.1675
78	30	80	644000	3660	DFT-s-OFDM PI/2 BPSK	1@1	15.75	22.25	0.1679
78	30	80	644000	3660	DFT-s-OFDM QPSK	1@1	15.68	22.18	0.1652
78	30	80	644000	3660	DFT-s-OFDM 16 QAM	1@1	15.73	22.23	0.1671
78	30	90	639668	3595.02	DFT-s-OFDM PI/2 BPSK	1@1	15.6	22.1	0.1622
78	30	90	639668	3595.02	DFT-s-OFDM QPSK	1@1	15.5	22	0.1585
78	30	90	639668	3595.02	DFT-s-OFDM 16 QAM	1@1	15.68	22.18	0.1652
78	30	90	641666	3624.99	DFT-s-OFDM PI/2 BPSK	1@1	15.56	22.06	0.1607
78	30	90	641666	3624.99	DFT-s-OFDM QPSK	1@1	15.5	22	0.1585
78	30	90	641666	3624.99	DFT-s-OFDM 16 QAM	1@1	15.73	22.23	0.1671
78	30	90	643666	3654.99	DFT-s-OFDM PI/2 BPSK	1@1	15.48	21.98	0.1578
78	30	90	643666	3654.99	DFT-s-OFDM QPSK	1@1	15.52	22.02	0.1592
78	30	90	643666	3654.99	DFT-s-OFDM 16 QAM	1@1	15.66	22.16	0.1644

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NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	ANT0 Power(dBm)	ANT6 Power(dBm)	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
78	30	100	640000	3600	CP-OFDM QPSK	137@68	13.47	13.2	16.35	22.85	0.1926
78	30	100	640000	3600	CP-OFDM QPSK	1@1	13.4	13.23	16.33	22.83	0.1917
78	30	100	640000	3600	CP-OFDM QPSK	1@271	13.34	13.38	16.37	22.87	0.1937
78	30	100	640000	3600	CP-OFDM 16 QAM	137@68	13.61	13.3	16.47	22.97	0.1981
78	30	100	640000	3600	CP-OFDM 16 QAM	1@1	12.88	13.89	16.42	22.92	0.1961
78	30	100	640000	3600	CP-OFDM 16 QAM	1@271	12.94	13.38	16.18	22.68	0.1852
78	30	100	640000	3600	CP-OFDM 64 QAM	137@68	12.34	12.7	15.53	22.03	0.1597
78	30	100	640000	3600	CP-OFDM 64 QAM	1@1	11.73	12.56	15.18	21.68	0.1471
78	30	100	640000	3600	CP-OFDM 64 QAM	1@271	11.72	11.79	14.77	21.27	0.1338
78	30	100	640000	3600	CP-OFDM 256 QAM	137@68	9.4	9.8	12.61	19.11	0.0816
78	30	100	640000	3600	CP-OFDM 256 QAM	1@1	9.16	9.64	12.42	18.92	0.0779
78	30	100	640000	3600	CP-OFDM 256 QAM	1@271	9.06	8.95	12.02	18.52	0.0711
78	30	100	641666	3624.99	CP-OFDM QPSK	137@68	13.5	13.4	16.46	22.96	0.1977
78	30	100	641666	3624.99	CP-OFDM QPSK	1@1	13.26	13.01	16.15	22.65	0.1840
78	30	100	641666	3624.99	CP-OFDM QPSK	1@271	13.34	13.55	16.46	22.96	0.1975
78	30	100	641666	3624.99	CP-OFDM 16 QAM	137@68	13.5	13.43	16.48	22.98	0.1984
78	30	100	641666	3624.99	CP-OFDM 16 QAM	1@1	12.94	13.56	16.27	22.77	0.1893
78	30	100	641666	3624.99	CP-OFDM 16 QAM	1@271	12.91	13.76	16.37	22.87	0.1935
78	30	100	641666	3624.99	CP-OFDM 64 QAM	137@68	12.41	12.6	15.52	22.02	0.1591
78	30	100	641666	3624.99	CP-OFDM 64 QAM	1@1	11.71	12.54	15.16	21.66	0.1464
78	30	100	641666	3624.99	CP-OFDM 64 QAM	1@271	11.68	12.09	14.90	21.40	0.1380
78	30	100	641666	3624.99	CP-OFDM 256 QAM	137@68	9.42	9.62	12.53	19.03	0.0800
78	30	100	641666	3624.99	CP-OFDM 256 QAM	1@1	9.17	9.72	12.46	18.96	0.0788
78	30	100	641666	3624.99	CP-OFDM 256 QAM	1@271	9.09	9.1	12.11	18.61	0.0725
78	30	100	643332	3649.98	CP-OFDM QPSK	137@68	13.16	13.55	16.37	22.87	0.1936
78	30	100	643332	3649.98	CP-OFDM QPSK	1@1	13.48	13.45	16.48	22.98	0.1984
78	30	100	643332	3649.98	CP-OFDM QPSK	1@271	13.35	13.57	16.47	22.97	0.1982
78	30	100	643332	3649.98	CP-OFDM 16 QAM	137@68	13.25	13.56	16.42	22.92	0.1958
78	30	100	643332	3649.98	CP-OFDM 16 QAM	1@1	13	13.68	16.36	22.86	0.1934
78	30	100	643332	3649.98	CP-OFDM 16 QAM	1@271	13.05	13.59	16.34	22.84	0.1923
78	30	100	643332	3649.98	CP-OFDM 64 QAM	137@68	12.52	12.79	15.67	22.17	0.1647
78	30	100	643332	3649.98	CP-OFDM 64 QAM	1@1	11.8	12.46	15.15	21.65	0.1463
78	30	100	643332	3649.98	CP-OFDM 64 QAM	1@271	11.75	12.22	15.00	21.50	0.1413
78	30	100	643332	3649.98	CP-OFDM 256 QAM	137@68	9.56	9.84	12.71	19.21	0.0834
78	30	100	643332	3649.98	CP-OFDM 256 QAM	1@1	9.17	9.66	12.43	18.93	0.0782
78	30	100	643332	3649.98	CP-OFDM 256 QAM	1@271	9.17	9.35	12.27	18.77	0.0754
78	30	10	637000	3555	CP-OFDM QPSK	1@1	13.43	13.5	16.48	22.98	0.1984
78	30	10	637000	3555	CP-OFDM 16 QAM	1@1	13	13.82	16.44	22.94	0.1968
78	30	10	637000	3555	CP-OFDM 64 QAM	1@1	11.65	12.34	15.02	21.52	0.1419
78	30	10	641666	3624.99	CP-OFDM QPSK	1@1	13.35	13.51	16.44	22.94	0.1968
78	30	10	641666	3624.99	CP-OFDM 16 QAM	1@1	12.91	13.64	16.30	22.80	0.1906
78	30	10	641666	3624.99	CP-OFDM 64 QAM	1@1	11.73	12.03	14.89	21.39	0.1378

78	30	10	646332	3694.98	CP-OFDM QPSK	1@1	13.23	13.65	16.46	22.96	0.1975
78	30	10	646332	3694.98	CP-OFDM 16 QAM	1@1	12.93	13.86	16.43	22.93	0.1963
78	30	10	646332	3694.98	CP-OFDM 64 QAM	1@1	11.82	12.31	15.08	21.58	0.1440
78	30	15	637168	3557.52	CP-OFDM QPSK	1@1	13.23	13.36	16.31	22.81	0.1908
78	30	15	637168	3557.52	CP-OFDM 16 QAM	1@1	13.29	13.40	16.36	22.86	0.1930
78	30	15	637168	3557.52	CP-OFDM 64 QAM	1@1	12.01	12.66	15.36	21.86	0.1534
78	30	15	641666	3624.99	CP-OFDM QPSK	1@1	13.75	13.17	16.48	22.98	0.1986
78	30	15	641666	3624.99	CP-OFDM 16 QAM	1@1	13.23	13.65	16.46	22.96	0.1975
78	30	15	641666	3624.99	CP-OFDM 64 QAM	1@1	12.11	12.53	15.34	21.84	0.1526
78	30	15	646166	3692.49	CP-OFDM QPSK	1@1	13.15	13.34	16.26	22.76	0.1886
78	30	15	646166	3692.49	CP-OFDM 16 QAM	1@1	13.20	13.24	16.23	22.73	0.1875
78	30	15	646166	3692.49	CP-OFDM 64 QAM	1@1	13.30	13.38	16.35	22.85	0.1928
78	30	20	637334	3560.01	CP-OFDM QPSK	1@1	13.64	13.2	16.44	22.94	0.1966
78	30	20	637334	3560.01	CP-OFDM 16 QAM	1@1	13.2	13.35	16.29	22.79	0.1899
78	30	20	637334	3560.01	CP-OFDM 64 QAM	1@1	11.92	12.64	15.31	21.81	0.1515
78	30	20	641666	3624.99	CP-OFDM QPSK	1@1	13.25	13.65	16.46	22.96	0.1979
78	30	20	641666	3624.99	CP-OFDM 16 QAM	1@1	13.3	13.52	16.42	22.92	0.1960
78	30	20	641666	3624.99	CP-OFDM 64 QAM	1@1	12.01	12.47	15.26	21.76	0.1498
78	30	20	646000	3690	CP-OFDM QPSK	1@1	12.85	12.46	15.67	22.17	0.1648
78	30	20	646000	3690	CP-OFDM 16 QAM	1@1	13.45	13.49	16.48	22.98	0.1986
78	30	20	646000	3690	CP-OFDM 64 QAM	1@1	12.66	12.47	15.58	22.08	0.1613
78	30	25	647500	3562.5	CP-OFDM QPSK	1@1	13.23	13.65	16.46	22.96	0.1975
78	30	25	647500	3562.5	CP-OFDM 16 QAM	1@1	13.25	13.19	16.23	22.73	0.1875
78	30	25	647500	3562.5	CP-OFDM 64 QAM	1@1	11.97	12.63	15.32	21.82	0.1522
78	30	25	641666	3624.99	CP-OFDM QPSK	1@1	13.56	13.36	16.47	22.97	0.1982
78	30	25	641666	3624.99	CP-OFDM 16 QAM	1@1	13.28	13.57	16.44	22.94	0.1967
78	30	25	641666	3624.99	CP-OFDM 64 QAM	1@1	11.94	12.39	15.18	21.68	0.1473
78	30	25	645833	3687.495	CP-OFDM QPSK	1@1	12.83	13.43	16.15	22.65	0.1841
78	30	25	645833	3687.495	CP-OFDM 16 QAM	1@1	13.44	13.32	16.39	22.89	0.1946
78	30	25	645833	3687.495	CP-OFDM 64 QAM	1@1	11.62	12.01	14.83	21.33	0.1358
78	30	30	637668	3565.02	CP-OFDM QPSK	1@1	13.42	13.26	16.35	22.85	0.1928
78	30	30	637668	3565.02	CP-OFDM 16 QAM	1@1	13.09	13.56	16.34	22.84	0.1924
78	30	30	637668	3565.02	CP-OFDM 64 QAM	1@1	11.89	12.56	15.25	21.75	0.1496
78	30	30	641666	3624.99	CP-OFDM QPSK	1@1	13.26	13.41	16.35	22.85	0.1926
78	30	30	641666	3624.99	CP-OFDM 16 QAM	1@1	13.16	13.52	16.35	22.85	0.1929
78	30	30	641666	3624.99	CP-OFDM 64 QAM	1@1	11.8	12.39	15.12	21.62	0.1451
78	30	30	645666	3684.99	CP-OFDM QPSK	1@1	13.65	13.25	16.46	22.96	0.1979
78	30	30	645666	3684.99	CP-OFDM 16 QAM	1@1	12.88	13.27	16.09	22.59	0.1815
78	30	30	645666	3684.99	CP-OFDM 64 QAM	1@1	11.53	11.68	14.62	21.12	0.1293
78	30	40	638000	3570	CP-OFDM QPSK	1@1	13.34	13.56	16.46	22.96	0.1978
78	30	40	638000	3570	CP-OFDM 16 QAM	1@1	12.98	13.85	16.45	22.95	0.1971
78	30	40	638000	3570	CP-OFDM 64 QAM	1@1	11.72	12.49	15.13	21.63	0.1456
78	30	40	641666	3624.99	CP-OFDM QPSK	1@1	13.38	13.52	16.46	22.96	0.1977
78	30	40	641666	3624.99	CP-OFDM 16 QAM	1@1	12.96	13.81	16.42	22.92	0.1957
78	30	40	641666	3624.99	CP-OFDM 64 QAM	1@1	11.68	12.38	15.05	21.55	0.1430

78	30	40	645332	3679.98	CP-OFDM QPSK	1@1	13.54	12.98	16.28	22.78	0.1896
78	30	40	645332	3679.98	CP-OFDM 16 QAM	1@1	13.22	13.07	16.16	22.66	0.1843
78	30	40	645332	3679.98	CP-OFDM 64 QAM	1@1	11.43	12	14.73	21.23	0.1329
78	30	50	638334	3575.01	CP-OFDM QPSK	1@1	10.11	11.28	13.74	20.24	0.1058
78	30	50	638334	3575.01	CP-OFDM 16 QAM	1@1	11.53	12.96	15.31	21.81	0.1518
78	30	50	638334	3575.01	CP-OFDM 64 QAM	1@1	11.99	12.77	15.41	21.91	0.1552
78	30	50	641666	3624.99	CP-OFDM QPSK	1@1	13.66	13.22	16.46	22.96	0.1975
78	30	50	641666	3624.99	CP-OFDM 16 QAM	1@1	13.4	13.27	16.35	22.85	0.1926
78	30	50	641666	3624.99	CP-OFDM 64 QAM	1@1	12.05	12.76	15.43	21.93	0.1559
78	30	50	645000	3675	CP-OFDM QPSK	1@1	13.23	13.56	16.41	22.91	0.1954
78	30	50	645000	3675	CP-OFDM 16 QAM	1@1	12.65	12.23	15.46	21.96	0.1569
78	30	50	645000	3675	CP-OFDM 64 QAM	1@1	11.73	11.21	14.49	20.99	0.1255
78	30	60	638668	3580.02	CP-OFDM QPSK	1@1	13.19	13.23	16.22	22.72	0.1871
78	30	60	638668	3580.02	CP-OFDM 16 QAM	1@1	13.21	13.24	16.24	22.74	0.1877
78	30	60	638668	3580.02	CP-OFDM 64 QAM	1@1	11.93	12.68	15.33	21.83	0.1525
78	30	60	641666	3624.99	CP-OFDM QPSK	1@1	10.55	11.02	13.80	20.30	0.1072
78	30	60	641666	3624.99	CP-OFDM 16 QAM	1@1	10.05	11.23	13.69	20.19	0.1045
78	30	60	641666	3624.99	CP-OFDM 64 QAM	1@1	11.87	12.61	15.27	21.77	0.1502
78	30	60	644666	3669.99	CP-OFDM QPSK	1@1	13.32	12.86	16.11	22.61	0.1822
78	30	60	644666	3669.99	CP-OFDM 16 QAM	1@1	12.62	12.96	15.80	22.30	0.1700
78	30	60	644666	3669.99	CP-OFDM 64 QAM	1@1	11.22	11.06	14.15	20.65	0.1162
78	30	80	639334	3590.01	CP-OFDM QPSK	1@1	11.25	12.02	14.66	21.16	0.1307
78	30	80	639334	3590.01	CP-OFDM 16 QAM	1@1	13.06	13.58	16.34	22.84	0.1922
78	30	80	639334	3590.01	CP-OFDM 64 QAM	1@1	11.83	12.56	15.22	21.72	0.1486
78	30	80	641666	3624.99	CP-OFDM QPSK	1@1	12.46	13.21	15.86	22.36	0.1722
78	30	80	641666	3624.99	CP-OFDM 16 QAM	1@1	12.96	13.2	16.09	22.59	0.1816
78	30	80	641666	3624.99	CP-OFDM 64 QAM	1@1	11.82	12.61	15.24	21.74	0.1494
78	30	80	644000	3660	CP-OFDM QPSK	1@1	12.92	13.1	16.02	22.52	0.1787
78	30	80	644000	3660	CP-OFDM 16 QAM	1@1	12.89	13.02	15.97	22.47	0.1764
78	30	80	644000	3660	CP-OFDM 64 QAM	1@1	11.31	11.88	14.61	21.11	0.1293
78	30	90	639668	3595.02	CP-OFDM QPSK	1@1	13.44	13.03	16.25	22.75	0.1884
78	30	90	639668	3595.02	CP-OFDM 16 QAM	1@1	13	13.66	16.35	22.85	0.1929
78	30	90	639668	3595.02	CP-OFDM 64 QAM	1@1	11.81	12.56	15.21	21.71	0.1483
78	30	90	641666	3624.99	CP-OFDM QPSK	1@1	13.46	13.14	16.31	22.81	0.1911
78	30	90	641666	3624.99	CP-OFDM 16 QAM	1@1	13.01	13.36	16.20	22.70	0.1862
78	30	90	641666	3624.99	CP-OFDM 64 QAM	1@1	11.78	12.67	15.26	21.76	0.1499
78	30	90	643666	3654.99	CP-OFDM QPSK	1@1	12.99	13.01	16.01	22.51	0.1783
78	30	90	643666	3654.99	CP-OFDM 16 QAM	1@1	12.56	12.94	15.76	22.26	0.1684
78	30	90	643666	3654.99	CP-OFDM 64 QAM	1@1	11.28	11.93	14.63	21.13	0.1296

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris	Temperature :	22~25℃
		Relative Humidity :	48~52%

SA n78 / NR 100MHz / QPSK / ANT 0								
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)
Low	7110	-64.18	-40	-24.18	-75.64	2.84	14.30	H
	10663	-61.44	-40	-21.44	-71.38	3.49	13.43	H
	14216	-60.80	-40	-20.80	-71.04	3.85	14.09	H
	7110	-64.05	-40	-24.05	-75.51	2.84	14.30	V
	10663	-61.93	-40	-21.93	-71.87	3.49	13.43	V
	14216	-60.86	-40	-20.86	-71.10	3.85	14.09	V
Middle	7165	-63.23	-40	-23.23	-74.69	2.84	14.30	H
	10740	-61.21	-40	-21.21	-71.15	3.49	13.43	H
	14315	-60.46	-40	-20.46	-70.70	3.85	14.09	H
	7165	-63.62	-40	-23.62	-75.08	2.84	14.30	V
	10740	-61.04	-40	-21.04	-70.98	3.49	13.43	V
	14315	-60.03	-40	-20.03	-70.27	3.85	14.09	V
High	7209	-63.16	-40	-23.16	-74.62	2.84	14.30	H
	10817	-61.53	-40	-21.53	-71.47	3.49	13.43	H
	14425	-60.39	-40	-20.39	-70.63	3.85	14.09	H
	7209	-64.01	-40	-24.01	-75.47	2.84	14.30	V
	10817	-61.80	-40	-21.80	-71.74	3.49	13.43	V
	14425	-60.43	-40	-20.43	-70.67	3.85	14.09	V

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

EN-DC_7A_n78A / LTE 10MHz + NR 100MHz / QPSK / ANT7 (LTE) & ANT0(NR)								
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)
Low	7110	-64.72	-40	-24.72	-76.18	2.84	14.30	H
	10663	-62.04	-40	-22.04	-71.98	3.49	13.43	H
	14216	-61.13	-40	-21.13	-71.37	3.85	14.09	H
	7110	-65.02	-40	-25.02	-76.48	2.84	14.30	V
	10663	-62.24	-40	-22.24	-72.18	3.49	13.43	V
	14216	-61.78	-40	-21.78	-72.02	3.85	14.09	V
Middle	7165	-64.01	-40	-24.01	-75.47	2.84	14.30	H
	10740	-61.55	-40	-21.55	-71.49	3.49	13.43	H
	14315	-61.31	-40	-21.31	-71.55	3.85	14.09	H
	7165	-64.18	-40	-24.18	-75.64	2.84	14.30	V
	10740	-61.58	-40	-21.58	-71.52	3.49	13.43	V
	14315	-61.65	-40	-21.65	-71.89	3.85	14.09	V
High	7209	-64.68	-40	-24.68	-76.14	2.84	14.30	H
	10817	-62.48	-40	-22.48	-72.42	3.49	13.43	H
	14425	-61.01	-40	-21.01	-71.25	3.85	14.09	H
	7209	-64.54	-40	-24.54	-76.00	2.84	14.30	V
	10817	-62.41	-40	-22.41	-72.35	3.49	13.43	V
	14425	-61.12	-40	-21.12	-71.36	3.85	14.09	V

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

SA n78 UL_MIMO / NR 100MHz / QPSK / ANT 0+6								
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)
Low	7110	-63.89	-40	-23.89	-75.35	2.84	14.30	H
	10663	-61.20	-40	-21.20	-71.14	3.49	13.43	H
	14216	-61.03	-40	-21.03	-71.27	3.85	14.09	H
	7110	-64.31	-40	-24.31	-75.77	2.84	14.30	V
	10663	-61.38	-40	-21.38	-71.32	3.49	13.43	V
	14216	-60.69	-40	-20.69	-70.93	3.85	14.09	V
Middle	7165	-63.80	-40	-23.80	-75.26	2.84	14.30	H
	10740	-61.24	-40	-21.24	-71.18	3.49	13.43	H
	14315	-60.64	-40	-20.64	-70.88	3.85	14.09	H
	7165	-63.82	-40	-23.82	-75.28	2.84	14.30	V
	10740	-61.33	-40	-21.33	-71.27	3.49	13.43	V
	14315	-60.16	-40	-20.16	-70.40	3.85	14.09	V
High	7209	-63.89	-40	-23.89	-75.35	2.84	14.30	H
	10817	-61.70	-40	-21.70	-71.64	3.49	13.43	H
	14425	-60.43	-40	-20.43	-70.67	3.85	14.09	H
	7209	-64.18	-40	-24.18	-75.64	2.84	14.30	V
	10817	-61.91	-40	-21.91	-71.85	3.49	13.43	V
	14425	-60.40	-40	-20.40	-70.64	3.85	14.09	V

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