RF TEST REPORT

Applicant	Fibocom Wireless Inc.
FCC ID	ZMOFG101NA
Product	LTE Module
Brand	Fibocom
Model	FG101-NA
Report No.	R2404A0415-R1V2
Issue Date	May 14, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2023)/ FCC CFR 47 Part 22H (2023)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	May 9, 2024
Rev.1	Update description.	May 13, 2024
Rev.2	Update information	May 14, 2024
Note: This revised report (Report No.: R2404A0415-R1V2) supersedes and replaces the previously issued report (Report No.: R2404A0415-R1V1). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of Measurement Results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Radiated Power	2.1046 22.913(a)(5)	PASS
2	Occupied Bandwidth	2.1049	Not Test [1]
3	Band Edge Compliance	2.1051 / 22.917(a)	Not Test [1]
4	Peak-to-Average Power Ratio	22.913(d) KDB 971168 D01(5.7)	Not Test [1]
5	Frequency Stability	2.1055 / 22.355	Not Test [1]
6	Spurious Emissions at Antenna Terminals	2.1051 / 22.917(a)	Not Test [1]
7	Radiated Spurious Emission	2.1053 / 22.917 (a)	PASS
Date of Testing: April 19, 2024 ~ April 28, 2024 Date of Sample Received: April 15, 2024			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. 1. Not Test means after evaluation, test items are no need to test, the test results please refer to Original Report. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

FG101-NA (Report No.: R2404A0415-R1V2) is a variant model of FG101-NA (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02).

The detailed product change description please refers to following table:

Different	Original		Variant
Band	WCDMA Band ll/IV/V LTE Band 2/4/5/7/12/13/14/17/25/26/30/41/48/66/71		WCDMA Band ll/V LTE Band 4/5/12/41/66
Antenna Gain	WCDMA Band II: 2.20 dBi	LTE Band 17: 2.20 dBi	WCDMA Band II: 2.79 dBi
	WCDMA Band IV: 4.07 dBi	LTE Band 25: 4.07 dBi	WCDMA Band V: 0.69 dBi
	WCDMA Band V: 4.07 dBi	LTE Band 26: 2.20 dBi	LTE Band 4: 3.32 dBi
	LTE Band 2: 4.07 dBi	LTE Band 30: 0.22 dBi	LTE Band 5: 0.69 dBi
	LTE Band 4: 4.07 dBi	LTE Band 41: 4.07 dBi	LTE Band 12: 0 dBi
	LTE Band 5: 2.20 dBi	LTE Band 48: -1.18 dBi	LTE Band 41: 4.07 dBi
	LTE Band 7: 4.07 dBi	LTE Band 66: 4.07 dBi	LTE Band 66: 3.32 dBi
	LTE Band 12: 2.20 dBi	LTE Band 71: 2.20 dBi	
	LTE Band 13: 2.20 dBi		

This report only test Radiated Spurious Emission and because of the change of antenna gain, Effective Radiated Power also re-evaluated.

This report is used in conjunction with the original report (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02).

The detailed product change description please refers to the *Difference Declaration Letter*.

1. Test Laboratory

1.1. Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
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E-mail:	Kain.Xu@cpt.eurofinscn.com

2. General Description of Equipment Under Test

2.1. Applicant and Manufacturer Information

Applicant	Fibocom Wireless Inc.
Applicant address	1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China
Manufacturer	Fibocom Wireless Inc.
Manufacturer address	1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China

2.2. General Information

EUT Description			
Model	FG101-NA		
Lab internal SN	R2404A0415/S01		
Hardware Version	V1.2		
Software Version	19101.1000.01.00.00.07		
Power Supply	AC adapter		
Antenna Type	Fixed External Antenna		
Antenna Gain	0.69 dBi		
Test Mode(s)	WCDMA Band V; LTE Band 5; CA_5B		
Test Modulation	(WCDMA) QPSK, 16QAM; (LTE) QPSK, 16QAM, 64QAM		
Maximum E.R.P.	WCDMA Band V	22.19 dBm	
	LTE Band 5	21.73 dBm	
	CA_5B	21.34 dBm	
Rated Power Supply Voltage	12V		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band V	824 ~ 849	869 ~ 894
	LTE Band 5	824 ~ 849	869 ~ 894
Host Equipment	Manufacturer: Shanghai Smawave Technology Co. ,Ltd Product Name: Cat12 Indoor CPE Model: SC421		
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.			

3. Applied Standards

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

Test standards:
FCC CFR 47 Part 22H (2023)

FCC CFR47 Part 2 (2023)

Reference standard:
ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4. Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (vertical), lie-down position (horizontal). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (vertical, vertical polarization for LTE Band and WCDMA Band; horizontal, horizontal polarization for CA Band) and the worst case was recorded.

All mode and data rates and positions and RB size and modulations were investigated.
Subsequently, only the worst case emissions are reported.
The following testing in WCDMA/LTE is set based on the maximum RF Output Power.
Test modes are chosen to be reported as the worst case configuration below:

Test items	**Modes/Modulation**
	WCDMA Band V
RF Power Output and Effective Radiated power	RMC HSDPA/HSUPA DC-HSDPA/HSPA+
Radiated Spurious Emission	RMC

Test modes are chosen as the worst case configuration below for LTE Band 5.

Test items	**Bandwidth (MHz)**				**Modulation**		**RB**			**Test Channel**		
	1.4	**3**	**5**	**10**	**QPSK**	**16QAM/ 64QAM**	**1**	**50%**	**100%**	**L**	**M**	**H**
RF power output and Effective Radiated power	O	O	O	O	O	O	O	O	O	O	O	O
Radiated Spurious Emission	O	-	O	O	O	-	O	-	-	-	O	-
Note	1. The mark “O” means that this configuration is chosen for testing. 2. The mark “-” means that this configuration is not testing.											

5. Test Case

5.1. RF Power Output and Effective Radiated Power

Ambient Condition

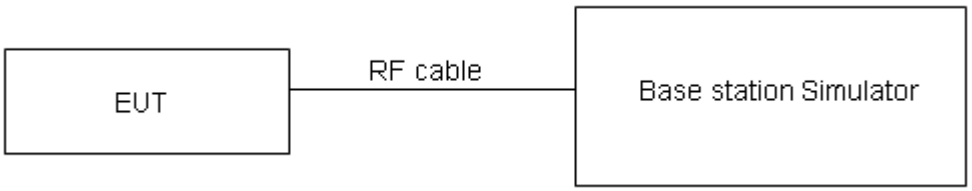
Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Methods of Measurement

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

ERP can then be calculated as follows:
EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)
EIRP (dBm) = ERP (dBm) + 2.15 (dB).

Test Setup



Limits

No specific RF power output requirements in part 2.1046.

Rule Part 22.913(a)(5) specifies that "Mobile/portable stations are limited to 7 watts ERP".

Limit	≤ 7 W (38.45 dBm)

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.4 dB for RF power output, *k* = 2, *U*= 1.19 dB for ERP.

Test Results

Refer to the section 6.1 of this report for test data.

5.2. Radiated Spurious Emission

Ambient Condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

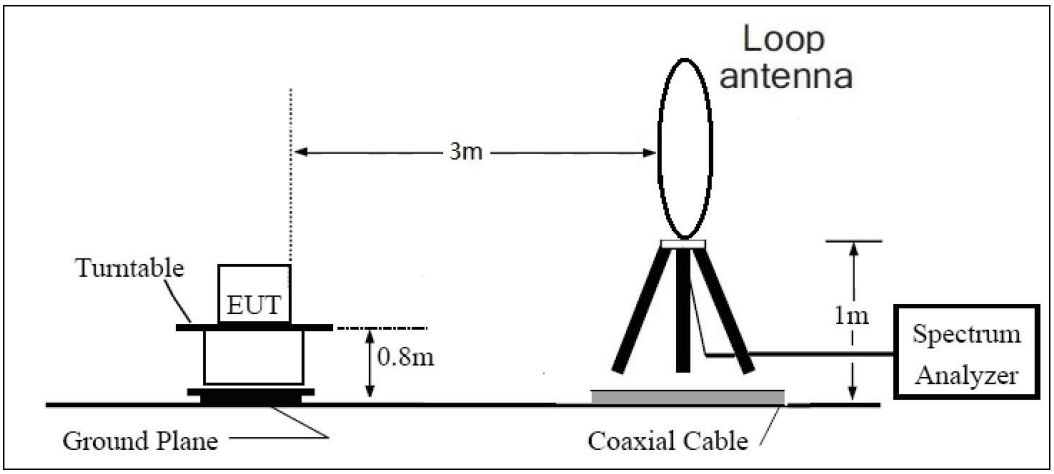
Method of Measurement

1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26-2015.
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=100kHz, VBW=300kHz, and the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an 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 (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:
Power (EIRP) = PMea - PAg - Pcl + Ga
The measurement results are amend as described below:
Power (EIRP) = PMea - Pcl + Ga
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dB) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dB.

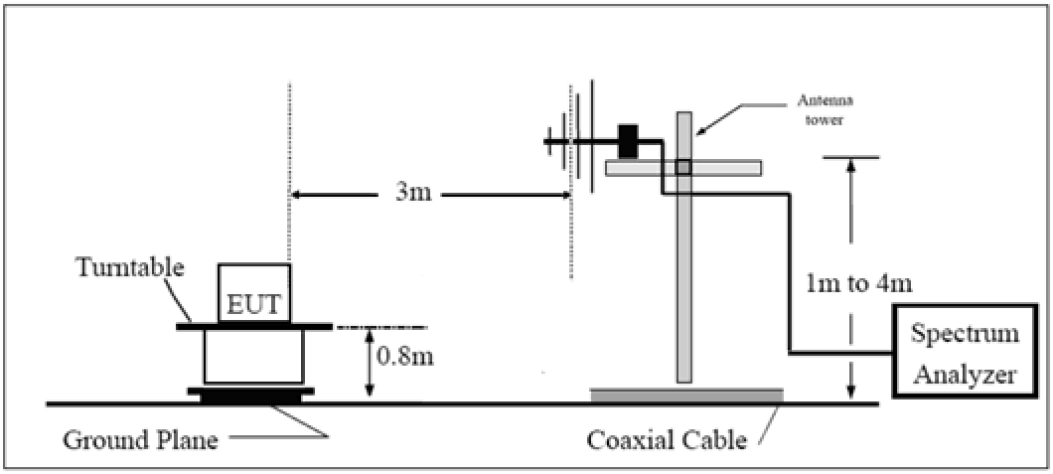
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test Setup

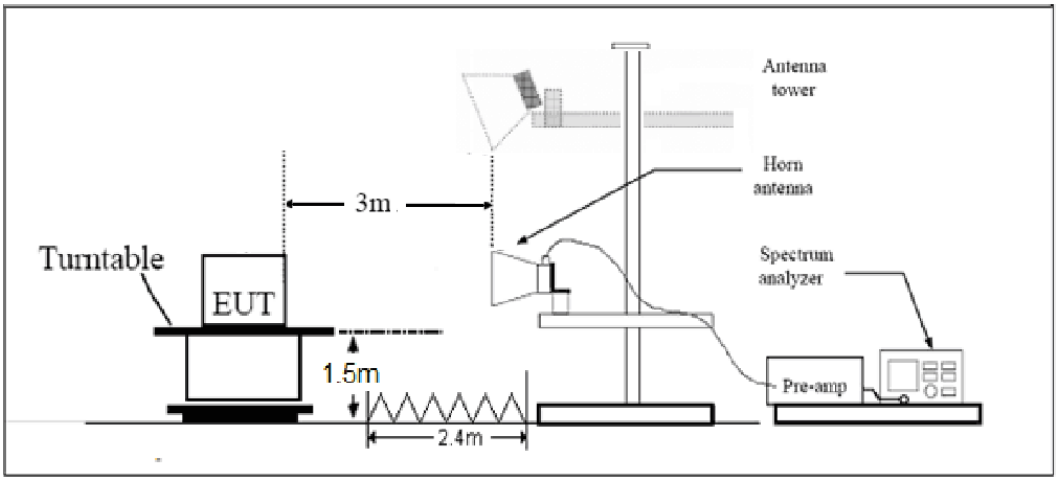
9KHz~ 30MHz



30MHz~ 1GHz



Above 1GHz



Note: Area side: 2.4mX3.6m

Limits

Rule Part 22.917(a) specifies 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.”

Limit	-13 dBm

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95％ confidence level for the normal distribution is with the coverage factor k = 1.96, U= 3.55 Db.

Test Results

Refer to the section 6.2 of this report for test data.

6. Test Result

6.1. RF Power Output and Effective Radiated Power

The RF Power Output comes from original report. (Report No.: SZ23060216W04; SZ23060216W05 and SZ23060216W02).

WCDMA Band V		Maximum Output Power (dBm)			ERP (dBm)		
		Channel 4132	Channel 4183	Channel 4233	Channel 4132	Channel 4183	Channel 4233
		826.4 (MHz)	836.6 (MHz)	846.6 (MHz)	826.4 (MHz)	836.6 (MHz)	846.6 (MHz)
RMC		23.58	23.65	23.60	22.12	22.19	22.14
HSDPA	Sub - Test 1	23.26	23.35	23.28	21.80	21.89	21.82
	Sub - Test 2	23.25	23.30	23.25	21.79	21.84	21.79
	Sub - Test 3	22.75	23.06	22.76	21.29	21.60	21.30
	Sub - Test 4	22.75	23.05	22.76	21.29	21.59	21.30
HSUPA	Sub - Test 1	21.64	21.81	22.92	20.18	20.35	21.46
	Sub - Test 2	21.92	22.09	22.40	20.46	20.63	20.94
	Sub - Test 3	22.44	22.61	22.84	20.98	21.15	21.38
	Sub - Test 4	22.38	22.57	22.87	20.92	21.11	21.41
	Sub - Test 5	22.41	22.58	22.81	20.95	21.12	21.35
DC-HSDPA	Sub - Test 1	23.08	23.00	22.96	21.62	21.54	21.50
	Sub - Test 2	23.06	22.98	23.10	21.60	21.52	21.64
	Sub - Test 3	22.55	22.56	22.65	21.09	21.10	21.19
	Sub - Test 4	22.66	22.57	22.55	21.20	21.11	21.09
HSPA+	16QAM	21.83	21.68	21.30	20.37	20.22	19.84

LTE Band 5				Maximum Output Power(dBm)			ERP (dBm)		
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20407 /824.7	20525 /836.5	20643 /848.3	20407 /824.7	20525 /836.5	20643 /848.3
1.4MHz	QPSK	1	0	23.12	23.14	23.17	21.66	21.68	21.71
		1	3	23.08	23.06	23.15	21.62	21.60	21.69
		1	5	22.92	22.96	23.02	21.46	21.50	21.56
		3	0	22.10	22.18	22.09	20.64	20.72	20.63
		3	1	22.12	22.03	22.08	20.66	20.57	20.62
		3	3	22.08	22.02	22.15	20.62	20.56	20.69
		6	0	21.88	22.02	22.00	20.42	20.56	20.54

	16QAM	1	0	22.09	22.36	22.28	20.63	20.90	20.82
		1	3	22.16	22.14	22.16	20.70	20.68	20.70
		1	5	22.14	22.14	22.28	20.68	20.68	20.82
		3	0	21.00	21.27	21.03	19.54	19.81	19.57
		3	1	21.20	21.21	21.29	19.74	19.75	19.83
		3	3	21.06	21.11	21.13	19.60	19.65	19.67
		6	0	21.02	21.05	21.25	19.56	19.59	19.79
	64QAM	1	0	21.28	21.26	21.15	19.82	19.80	19.69
		1	3	21.05	21.20	21.20	19.59	19.74	19.74
		1	5	21.09	21.27	21.08	19.63	19.81	19.62
		3	0	20.01	20.14	20.15	18.55	18.68	18.69
		3	1	20.07	20.16	20.01	18.61	18.70	18.55
		3	3	20.05	20.13	20.18	18.59	18.67	18.72
		6	0	20.16	20.26	20.21	18.70	18.80	18.75

BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20415 /825.5	20525 /836.5	20635 /847.5	20415 /825.5	20525 /836.5	20635 /847.5
3MHz	QPSK	1	0	23.05	23.17	23.15	21.59	21.71	21.69
		1	8	22.93	22.99	23.01	21.47	21.53	21.55
		1	14	23.01	23.06	23.07	21.55	21.60	21.61
		8	0	22.10	22.07	22.27	20.64	20.61	20.81
		8	4	22.10	22.35	22.12	20.64	20.89	20.66
		8	7	21.94	22.02	22.14	20.48	20.56	20.68
		15	0	22.15	22.18	22.20	20.69	20.72	20.74
	16QAM	1	0	22.21	22.33	22.19	20.75	20.87	20.73
		1	8	22.05	22.29	22.14	20.59	20.83	20.68
		1	14	22.10	22.14	22.32	20.64	20.68	20.86
		8	0	21.15	21.31	21.31	19.69	19.85	19.85
		8	4	20.95	21.29	21.23	19.49	19.83	19.77
		8	7	21.10	21.10	21.21	19.64	19.64	19.75
		15	0	21.09	21.23	21.12	19.63	19.77	19.66
	64QAM	1	0	21.25	21.28	21.36	19.79	19.82	19.90
		1	8	21.05	21.06	21.07	19.59	19.60	19.61
		1	14	21.10	21.09	21.26	19.64	19.63	19.80
		8	0	20.20	20.29	20.21	18.74	18.83	18.75
		8	4	20.09	20.13	20.10	18.63	18.67	18.64
		8	7	20.07	20.06	20.05	18.61	18.60	18.59

		15	0	20.03	20.01	19.98	18.57	18.55	18.52
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20425 /826.5	20525 /836.5	20625 /846.5	20425 /826.5	20525 /836.5	20625 /846.5
5MHz	QPSK	1	0	23.06	23.11	23.16	21.60	21.65	21.70
		1	12	23.04	23.08	23.02	21.58	21.62	21.56
		1	24	23.02	23.06	23.13	21.56	21.60	21.67
		12	0	22.17	22.31	22.19	20.71	20.85	20.73
		12	7	22.24	22.11	22.12	20.78	20.65	20.66
		12	13	22.08	22.14	22.03	20.62	20.68	20.57
		25	0	21.93	22.21	22.00	20.47	20.75	20.54
	16QAM	1	0	22.23	22.34	22.35	20.77	20.88	20.89
		1	12	22.22	22.17	22.08	20.76	20.71	20.62
		1	24	22.08	22.19	22.07	20.62	20.73	20.61
		12	0	21.08	21.27	21.20	19.62	19.81	19.74
		12	7	21.12	21.15	21.14	19.66	19.69	19.68
		12	13	21.12	21.09	21.19	19.66	19.63	19.73
		25	0	21.12	21.01	21.15	19.66	19.55	19.69
	64QAM	1	0	21.11	21.14	21.22	19.65	19.68	19.76
		1	12	21.18	21.12	21.02	19.72	19.66	19.56
		1	24	21.16	21.23	21.19	19.70	19.77	19.73
		12	0	20.10	20.21	20.18	18.64	18.75	18.72
		12	7	20.09	19.98	20.15	18.63	18.52	18.69
		12	13	19.92	20.08	19.93	18.46	18.62	18.47
		25	0	20.07	20.19	20.14	18.61	18.73	18.68
BW	Modulation	RB size	RB offset	Channel/Frequency(MHz)					
				20450 /829	20525 /836.5	20600 /844	20450 /829	20525 /836.5	20600 /844
10MHz	QPSK	1	0	23.09	23.15	23.19	21.63	21.69	21.73
		1	25	23.08	23.00	23.13	21.62	21.54	21.67
		1	49	22.91	23.13	23.16	21.45	21.67	21.70
		25	0	22.02	22.18	22.34	20.56	20.72	20.88
		25	12	22.15	22.28	22.10	20.69	20.82	20.64
		25	25	21.99	22.25	22.06	20.53	20.79	20.60
		50	0	22.11	22.14	22.20	20.65	20.68	20.74
	16QAM	1	0	22.16	22.32	22.36	20.70	20.86	20.90
		1	25	22.24	22.30	22.14	20.78	20.84	20.68

		1	49	21.96	22.06	22.33	20.50	20.60	20.87
		25	0	21.03	21.06	21.17	19.57	19.60	19.71
		25	12	21.06	20.98	21.11	19.60	19.52	19.65
		25	25	20.93	21.08	21.03	19.47	19.62	19.57
		50	0	20.97	21.24	21.12	19.51	19.78	19.66
	64QAM QPSK	1	0	21.22	21.31	21.25	19.76	19.85	19.79
		1	25	21.04	21.14	21.09	19.58	19.68	19.63
		1	49	21.03	21.18	21.16	19.57	19.72	19.70
		25	0	20.02	20.32	20.29	18.56	18.86	18.83
		25	12	20.17	20.11	20.15	18.71	18.65	18.69
		25	25	20.07	20.15	20.18	18.61	18.69	18.72
		50	0	20.14	20.23	20.16	18.68	18.77	18.70

LTE CA_5B Combination:20MHz+20MHz(100RB+100RB)									
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)
Channel	Channel		RB Size	RB Offset	RB Size	RB Offset			
20450	20549	QPSK	1	0	0	0	1	22.76	21.30
20476	20575	QPSK	1	0	0	0	1	22.80	21.34
20501	20600	QPSK	1	0	0	0	1	22.73	21.27

6.2. Radiated Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

WCDMA Band V CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1671.15	-69.65	1.70	8.70	Vertical	-64.80	-13.00	51.80	85
3	2514.95	-67.15	2.30	12.00	Vertical	-59.60	-13.00	46.60	63
4	3346.10	-66.19	2.70	12.70	Vertical	-58.34	-13.00	45.34	124
5	4184.30	-63.86	3.00	12.50	Vertical	-56.51	-13.00	43.51	27
6	5019.90	-62.85	3.40	12.50	Vertical	-55.90	-13.00	42.90	43
7	5854.70	-62.34	3.40	12.80	Vertical	-55.09	-13.00	42.09	46
8	6692.90	-59.72	4.10	11.50	Vertical	-54.47	-13.00	41.47	71
9	7526.50	-56.30	4.20	12.20	Vertical	-50.45	-13.00	37.45	223
10	8369.80	-55.39	4.30	12.50	Vertical	-49.34	-13.00	36.34	97

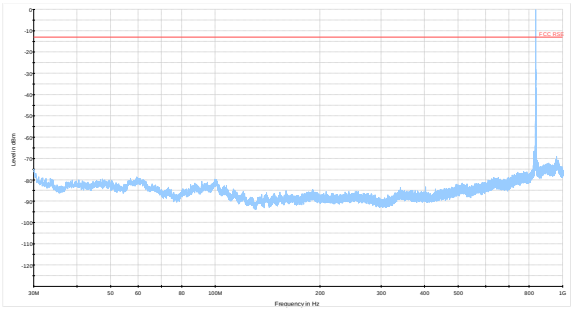
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.

LTE Band 5 1.4MHz CH-Middle

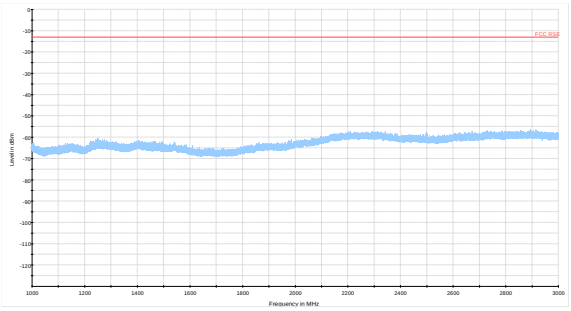
Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1671.25	-70.51	1.70	8.70	Vertical	-65.66	-13.00	52.66	258
3	2497.75	-65.12	2.30	12.00	Vertical	-57.57	-13.00	44.57	157
4	3344.70	-65.32	2.70	12.70	Vertical	-57.47	-13.00	44.47	64
5	4175.00	-63.20	3.00	12.50	Vertical	-55.85	-13.00	42.85	122
6	5016.00	-62.47	3.40	12.50	Vertical	-55.52	-13.00	42.52	35
7	5850.70	-62.70	3.40	12.80	Vertical	-55.45	-13.00	42.45	24
8	6683.30	-57.88	4.10	11.50	Vertical	-52.63	-13.00	39.63	221
9	7525.70	-54.90	4.20	12.20	Vertical	-49.05	-13.00	36.05	38
10	8355.80	-53.73	4.30	12.50	Vertical	-47.68	-13.00	34.68	12

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.

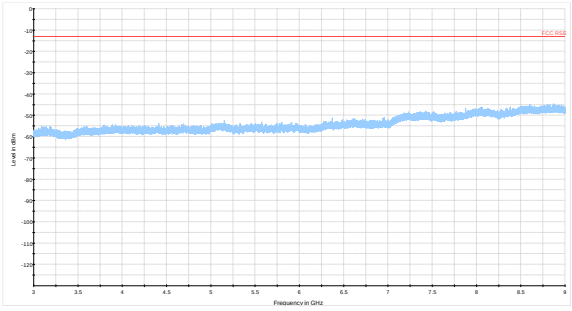
LTE Band 5 (1.4M) RB1 Middle Channel Link Mode 30MHz -1GHz



LTE Band 5 (1.4M) RB1 Middle Channel Link Mode 1GHz -3GHz



LTE Band 5 (1.4M) RB1 Middle Channel Link Mode 3GHz -18GHz



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LTE Band 5 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1668.90	-70.59	1.70	8.70	Vertical	-65.74	-13.00	52.74	21
3	2499.15	-65.63	2.30	12.00	Vertical	-58.08	-13.00	45.08	36
4	3337.80	-65.18	2.70	12.70	Vertical	-57.33	-13.00	44.33	33
5	4172.30	-62.59	3.00	12.50	Vertical	-55.24	-13.00	42.24	39
6	5003.50	-61.07	3.40	12.50	Vertical	-54.12	-13.00	41.12	127
7	5835.40	-61.21	3.40	12.80	Vertical	-53.96	-13.00	40.96	75
8	6671.80	-58.04	4.10	11.50	Vertical	-52.79	-13.00	39.79	221
9	7504.60	-55.22	4.20	12.20	Vertical	-49.37	-13.00	36.37	28
10	8338.30	-53.79	4.30	12.50	Vertical	-47.74	-13.00	34.74	117
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

LTE Band 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1663.60	-70.89	1.70	8.70	Vertical	-66.04	-13.00	53.04	243
3	2498.35	-65.14	2.30	12.00	Vertical	-57.59	-13.00	44.59	60
4	3323.40	-65.60	2.70	12.70	Vertical	-57.75	-13.00	44.75	14
5	4155.10	-62.73	3.00	12.50	Vertical	-55.38	-13.00	42.38	127
6	4986.90	-61.96	3.40	12.50	Vertical	-55.01	-13.00	42.01	61
7	5812.80	-63.11	3.40	12.80	Vertical	-55.86	-13.00	42.86	31
8	6654.60	-57.33	4.10	11.50	Vertical	-52.08	-13.00	39.08	118
9	7482.90	-55.65	4.20	12.20	Vertical	-49.80	-13.00	36.80	85
10	8317.20	-55.07	4.30	12.50	Vertical	-49.02	-13.00	36.02	46
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Vertical position.									

CA_5B 5MHz+10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1658.60	-68.52	1.70	8.70	Horizontal	-63.67	-13.00	50.67	243
3	2487.90	-67.19	2.30	12.00	Horizontal	-59.64	-13.00	46.64	60
4	3317.20	-66.24	2.70	12.70	Horizontal	-58.39	-13.00	45.39	14
5	4146.50	-63.69	3.00	12.50	Horizontal	-56.34	-13.00	43.34	127
6	4975.81	-62.52	3.40	12.50	Horizontal	-55.57	-13.00	42.57	61
7	5805.10	-62.79	3.40	12.80	Horizontal	-55.54	-13.00	42.54	31
8	6634.40	-59.27	4.10	11.50	Horizontal	-54.02	-13.00	41.02	118
9	7463.70	-54.04	4.20	12.20	Horizontal	-48.19	-13.00	35.19	85
10	8293.00	-54.22	4.30	12.50	Horizontal	-48.17	-13.00	35.17	46
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

CA_5B 10MHz+5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1658.00	-68.97	1.70	8.70	Horizontal	-64.12	-13.00	51.12	243
3	2487.00	-67.92	2.30	12.00	Horizontal	-60.37	-13.00	47.37	60
4	3316.00	-66.43	2.70	12.70	Horizontal	-58.58	-13.00	45.58	14
5	4145.00	-63.68	3.00	12.50	Horizontal	-56.33	-13.00	43.33	127
6	4974.00	-62.30	3.40	12.50	Horizontal	-55.35	-13.00	42.35	61
7	5803.00	-62.77	3.40	12.80	Horizontal	-55.52	-13.00	42.52	31
8	6632.00	-59.60	4.10	11.50	Horizontal	-54.35	-13.00	41.35	118
9	7461.00	-54.48	4.20	12.20	Horizontal	-48.63	-13.00	35.63	85
10	8290.00	-54.70	4.30	12.50	Horizontal	-48.65	-13.00	35.65	46
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

CA_5B 10MHz+10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1653.20	-68.75	1.70	8.70	Horizontal	-63.90	-13.00	50.90	243
3	2479.80	-67.32	2.30	12.00	Horizontal	-59.77	-13.00	46.77	60
4	3306.40	-66.30	2.70	12.70	Horizontal	-58.45	-13.00	45.45	14
5	4133.00	-63.66	3.00	12.50	Horizontal	-56.31	-13.00	43.31	127
6	4959.60	-62.19	3.40	12.50	Horizontal	-55.24	-13.00	42.24	61
7	5786.20	-62.63	3.40	12.80	Horizontal	-55.38	-13.00	42.38	31
8	6612.80	-59.60	4.10	11.50	Horizontal	-54.35	-13.00	41.35	118
9	7439.40	-54.96	4.20	12.20	Horizontal	-49.11	-13.00	36.11	85
10	8266.00	-54.50	4.30	12.50	Horizontal	-48.45	-13.00	35.45	46

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Horizontal position.

7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV30	100815	2023-12-05	2024-12-04
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2022-09-29	2025-09-28
Horn Antenna	SCHWARZBECK	BBHA 9120D	1594	2023-12-05	2026-12-04

ANNEX A: The EUT Appearance

The EUT Appearance is submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.

ANNEX C: Product Change Description

The Product Change Description are submitted separately.

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