RF MEASUREMENT REPORT

FCC ID:	ZMOMC610LA06
Application:	Fibocom Wireless Inc.
Product:	LTE Module
Model No.:	MC610-LA
Brand Name:	Fibocom
FCC Rule Part(s):	Part 2, 22 (H), 24 (E), 27
Result:	Complies
Test Date:	2022-11-07 ~ 2022-11-10

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2210RSU057-U1	Rev. 01	Initial Report	2022-11-15	Valid

Note: This application for certification is leveraging the data reuse procedures from KDB 484596 based on reference FCC ID: ZMOMC610LA to cover variant FCC ID: ZMOMC610LA06.

CONTENTS

1. General Information

1.1. Applicant

Fibocom Wireless Inc.

1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China

1.2. Manufacturer

Fibocom Wireless Inc.

1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**				
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China **Laboratory Location (Suzhou - SIP)** 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐R-20025	☐G-20034	☐C-20020	☐T-20020
		☐R-20141	☐G-20134	☐C-20103	☐T-20104
☐	**Test Site – MRT Shenzhen Laboratory**				
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	**Test Site – MRT Taiwan Laboratory**				
	Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: L3261-190725				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	LTE Module
Model No.	MC610-LA
Brand Name	Fibocom
IMEI	860369050013745
Operating Temp.	-30 ~ 75℃
3GPP Specification	GSM 850/1900 LTE Cat 1bis Band 5/7
Power Type	3.40 ~ 4.20Vdc, typical 3.80Vdc
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Radio Specification Under Test

GSM Specification	
TX Frequency Range	GSM/GPRS: 850: 824 ~ 849MHz 1900: 1850 ~ 1910MHz
RX Frequency Range	GSM/GPRS: 850: 869 ~ 894MHz 1900: 1930 ~ 1990MHz,
Modulation	GMSK
Power Class	GSM900: 4, PCS1800: 1
LTE Cat 1bis Specification	
FDD T_X Frequency Range	Band 5: 824 ~ 849 MHz; Band 7: 2500 ~ 2570 MHz
FDD R_X Frequency Range	Band 5: 869 ~ 894 MHz; Band 7: 2620 ~ 2690 MHz
Support Bandwidth	Band 5: 1.4MHz, 3MHz, 5MHz, 10MHz Band 7: 5MHz, 10MHz, 15MHz, 20MHz
Modulation	UL & DL up to 16QAM
Power Class	3

1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	MaxPeak Gain (dBi)
GSM850	824 ~ 849	Fixed External Antenna	1.5
PCS1900	1710 ~ 1755		1.4
LTE Cat 1bis Band 5	824 ~ 849		1.2
LTE Cat 1bis Band 7	2500 ~ 2570		2.3

Note 1: For other features of this EUT, test report will be issued separately.

Note 2: The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Note 3: 1.4MHz, 3MHz and 5MHz of LTE Band support 100% RB configuration for 16QAM; 10MHz, 15MHz and 20MHz of LTE Band maximum support 27 RB configuration for 16QAM.

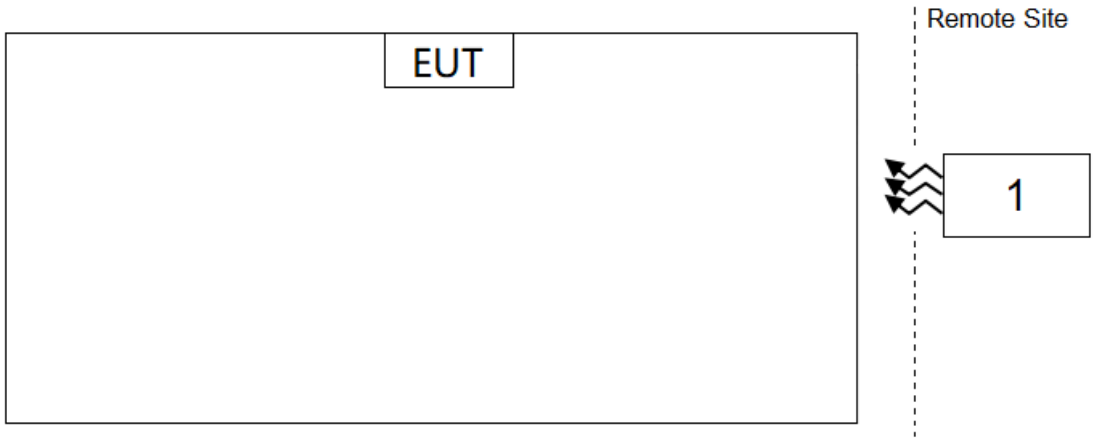
1.7. Test Methodology

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

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r01: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01: Determining ERP and EIRP

2. Test Configuration

2.1. Test System Connection Diagram



Product		Manufacturer	Model No.
1	Wideband Radio Communication Tester	R&S	CMW 500

2.2. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Signal Analyzer	Keysight	N9021B	MRTSUE06915	1 year	2022-12-29	SIP-SR1
Communication Tester	R&S	CMW500	MRTSUE06243	1 year	2023-10-08	SIP-SR1
Thermohygrometer	testo	622	MRTSUE06629	1 year	2023-01-06	SIP-SR1
DC POWER MODULE	Keysight	N6743B	MRTSUE06905	N/A	N/A	SIP-SR1
DC POWER MODULE	Keysight	N6743B	MRTSUE06906	N/A	N/A	SIP-SR1
Shielding Room	MIX-BEP	SIP-SR1	MRTSUE06948	N/A	N/A	SIP-SR1
Preamplifier	Schwarzbeck	BBV 9721	MRTSUE06121	1 year	2023-06-08	SIP-AC3
Horn Antenna	R&S	HF907	MRTSUE06611	1 year	2023-07-30	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06619	1 year	2023-11-01	SIP-AC3
Thermohygrometer	testo	608-H1	MRTSUE06622	1 year	2022-11-28	SIP-AC3
Preamplifier	EMCI	EMC012645SE	MRTSUE06642	1 year	2023-01-13	SIP-AC3
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06646	1 year	2023-08-16	SIP-AC3
Anechoic Chamber	RIKEN	SIP-AC3	MRTSUE06782	1 year	2022-12-23	SIP-AC3
Loop Antenna	Schwarzbeck	FMZB 1519 B	MRTSUE06937	1 year	2023-03-14	SIP-AC1/SIP-AC2/SIP-AC3
Signal Analyzer	Keysight	N9010B	MRTSUE06603	1 year	2023-10-25	SIP-AC1/SIP-AC2/SIP-AC3
Signal Analyzer	Keysight	N9020B	MRTSUE06604	1 year	2023-09-06	SIP-AC1/SIP-AC2/SIP-AC3
Directional Coupler	ar	DC7200A	MRTSUE06147	N/A	N/A	SIP
Directional Coupler	ar	DC6080A	MRTSUE06148	N/A	N/A	SIP-SR1
Directional Coupler	PULSAR	CS10-23-436/20	MRTSUE06846	1 year	2023-06-02	SIP-SR1
Directional Coupler	PULSAR	CS10-23-436/20	MRTSUE06848	1 year	2023-06-02	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11055	1 year	2023-06-09	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11056	1 year	2023-06-09	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11057	1 year	2023-06-09	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11058	1 year	2023-06-09	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11059	1 year	2023-06-09	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11060	1 year	2023-06-09	SIP-SR1

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802BS	V1.02	RE Antenna & Turntable

4. Decision Rules and Measurement Uncertainty

4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Parameter	Uncertainty
RF Conducted Output power	0.7 dB
Spurious emissions, Radiated	4.6 dB

5. Test Result

5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Verdict
22.913(a)(5)	Equivalent Radiated Power	Conducted	Pass
24.232(c) 27.50(h)(2)	Equivalent Isotropic Radiated Power		
2.1053, 22.917(a) 24.238(a), 27.53(m)	Spurious Emissions	Radiated	Pass

Notes:

1) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2) All supported modulation types were evaluated. The worst-case emission of modulation was selected. Therefore, the Equivalent Isotropic Radiated Power, Radiated Spurious Emission were presented the worst-case in the test report.
3) Based on the original report, this change is only disable BLE and LTE B2/4/8/66 via software. Then remove the relevant components.

5.2. Equivalent Isotropically Radiated Power Measurement

5.2.1. Test Limit

GSM 850 and LTE Band 5

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

PCS 1900 and LTE Band 7

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.2

5.2.3.Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

ERP or EIRP = P_{Meas} + G_T

where

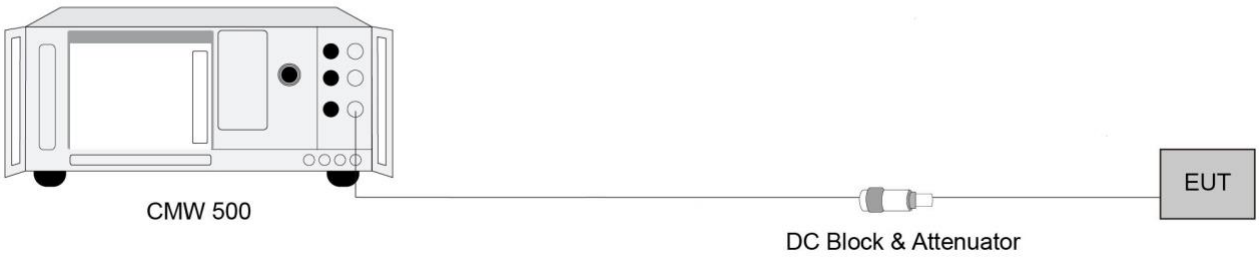
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

ERP = EIRP -2.15

5.2.4.Test Setup



5.2.5.Test Result

Refer to Appendix A.1.

5.3. Radiated Spurious Emissions Measurement

5.3.1. Test Limit

The power of any emission outside of theauthorized operating frequency ranges must be attenuated below the transmitting power (P) by a factorof at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

For LTE Band 7: For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth.

E (dBμV/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m or 70.3dBμV/m.

5.3.2. Test Procedure

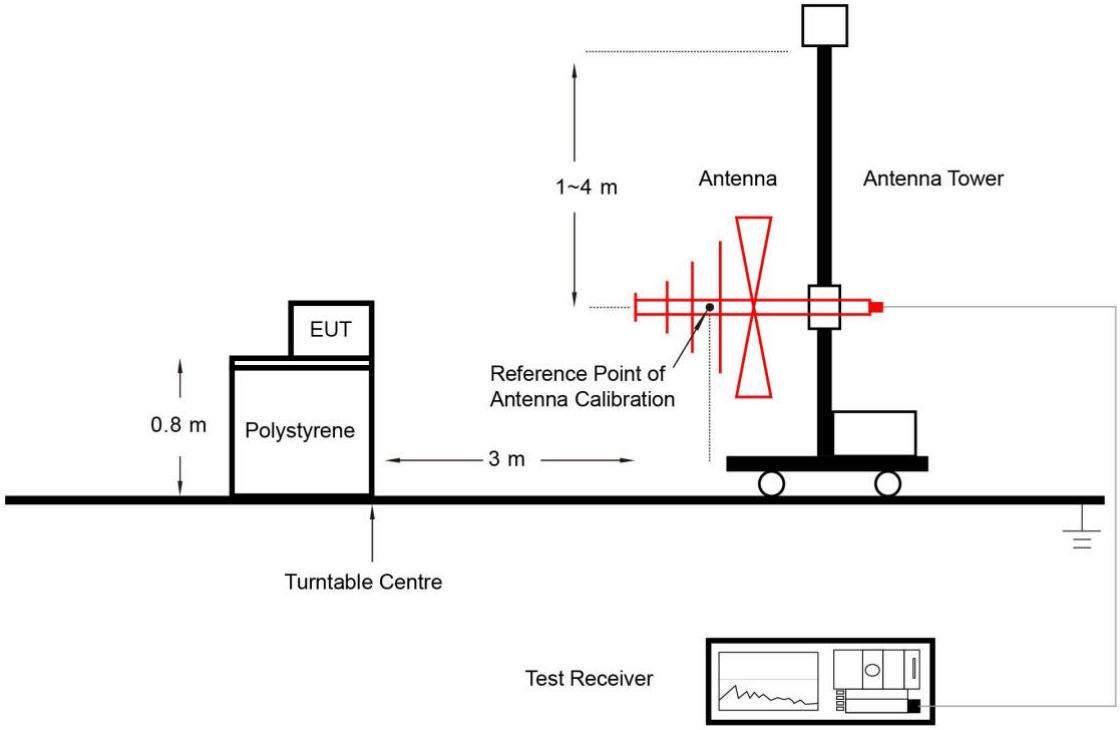
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.3.3. Test Setting

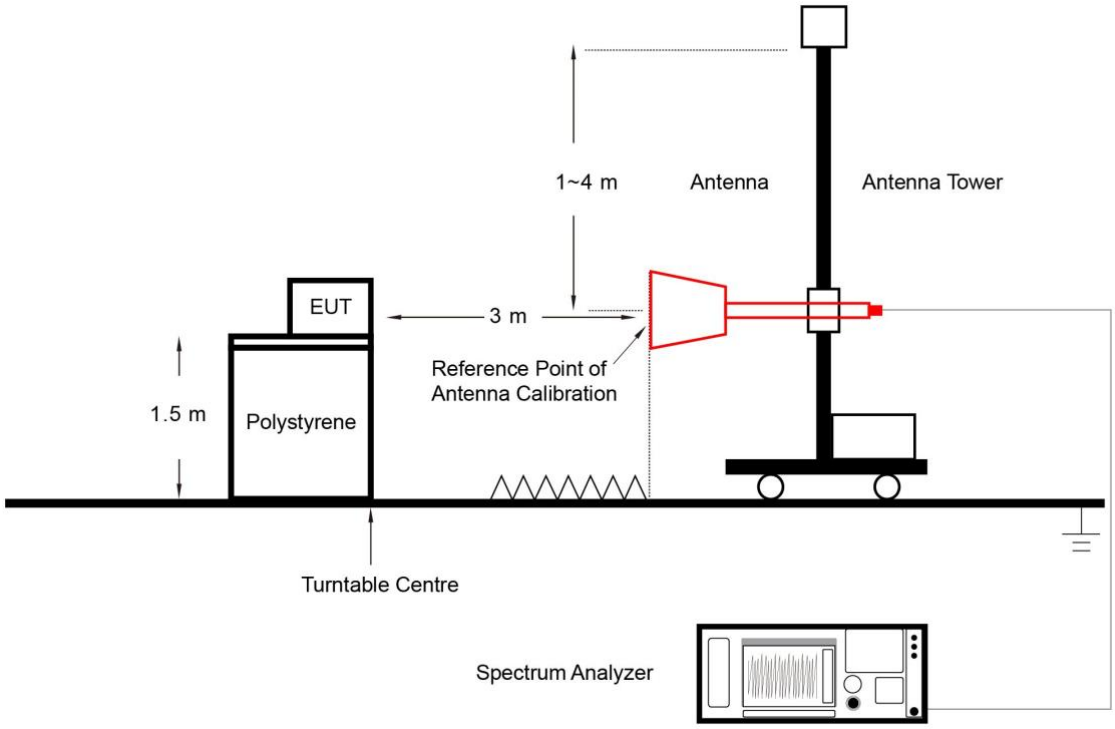
1. RBW = 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.3.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.3.5. Test Result

Refer to Appendix A.2.

Appendix A - Test Result

A.1 Equivalent Isotropically Radited Power Test Result

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/10/09	Test Band	GSM 850

Mode	Slot	Conducted Power (dBm)			Antenna Gain (dBi)	ERP (dBm)		
		GSM 850 Channel				GSM 850 Channel		
		128	189	251		128	189	251
GSM	/	31.85	32.20	32.35	1.50	31.20	31.55	31.70
GPRS	1	31.89	32.18	32.39	1.50	31.24	31.53	31.74
	2	29.86	30.15	30.32	1.50	29.21	29.50	29.67
	3	27.55	27.81	28.09	1.50	26.90	27.16	27.44
	4	25.55	25.68	25.83	1.50	24.90	25.03	25.18
Limit	38.45dBm							

Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/10/09	Test Band	GSM 1900

Mode	Slot	Conducted Power (dBm)			Antenna Gain (dBi)	EIRP (dBm)		
		PCS 1900 Channel				PCS 1900 Channel		
		512	661	810		512	661	810
GSM	/	29.45	29.46	29.47	0.90	30.35	30.36	30.37
GPRS	1	29.45	29.47	29.45	0.90	30.35	30.37	30.35
	2	27.43	27.51	27.70	0.90	28.33	28.41	28.60
	3	25.48	25.24	25.37	0.90	26.38	26.14	26.27
	4	23.33	23.37	23.35	0.90	24.23	24.27	24.25
Limit	33.01dBm							

Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/10/09	Test Band	LTE Band 5

Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
824.70	1.4	1	0	22.72	21.77	< 38.45
836.50				22.61	21.66	< 38.45
848.30				21.73	20.78	< 38.45
824.70	1.4	1	2	22.68	21.73	< 38.45
836.50				22.53	21.58	< 38.45
848.30				22.38	21.43	< 38.45
824.70	1.4	1	6	22.52	21.57	< 38.45
836.50				21.76	20.81	< 38.45
848.30				22.50	21.55	< 38.45
824.70	1.4	6	0	21.70	20.75	< 38.45
836.50				21.45	20.50	< 38.45
848.30				21.31	20.36	< 38.45
825.50	3	1	0	22.67	21.72	< 38.45
836.50				22.66	21.71	< 38.45
846.50				21.55	20.60	< 38.45
825.50	3	1	7	23.00	22.05	< 38.45
836.50				22.78	21.83	< 38.45
846.50				22.77	21.82	< 38.45
825.50	3	1	14	22.24	21.29	< 38.45
836.50				21.40	20.45	< 38.45
846.50				22.41	21.46	< 38.45
825.50	3	15	0	21.79	20.84	< 38.45
836.50				21.61	20.66	< 38.45
846.50				21.51	20.56	< 38.45
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15						

Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK						
826.50	5	1	0	22.76	21.81	< 38.45
836.50				22.75	21.80	< 38.45
846.50				21.90	20.95	< 38.45
826.50	5	1	12	22.49	21.54	< 38.45
836.50				22.36	21.41	< 38.45
846.50				22.37	21.42	< 38.45
826.50	5	1	24	22.39	21.44	< 38.45
836.50				22.05	21.10	< 38.45
846.50				22.54	21.59	< 38.45
826.50	5	25	0	21.72	20.77	< 38.45
836.50				21.64	20.69	< 38.45
846.50				21.55	20.60	< 38.45
829.00	10	1	0	22.85	21.90	< 38.45
836.50				22.81	21.86	< 38.45
844.00				22.16	21.21	< 38.45
829.00	10	1	24	22.55	21.60	< 38.45
836.50				22.60	21.65	< 38.45
844.00				22.55	21.60	< 38.45
829.00	10	1	49	22.97	22.02	< 38.45
836.50				22.08	21.13	< 38.45
844.00				23.08	22.13	< 38.45
829.00	10	50	0	21.69	20.74	< 38.45
836.50				21.75	20.80	< 38.45
844.00				21.63	20.68	< 38.45
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15						

Test Site	SIP-SR1	Test Engineer	Allen Zou
Test Date	2022/10/09	Test Band	LTE Band 7

Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
2502.50	5	1	0	22.34	24.64	< 33.01
2535.00				22.15	24.45	< 33.01
2567.50				22.48	24.78	< 33.01
2502.50	5	1	12	22.40	24.70	< 33.01
2535.00				22.15	24.45	< 33.01
2567.50				21.48	23.78	< 33.01
2502.50	5	1	24	23.02	25.32	< 33.01
2535.00				22.32	24.62	< 33.01
2567.50				22.19	24.49	< 33.01
2502.50	5	25	0	21.46	23.76	< 33.01
2535.00				21.38	23.68	< 33.01
2567.50				20.67	22.97	< 33.01
2505.00	10	1	0	22.40	24.70	< 33.01
2535.00				22.32	24.62	< 33.01
2565.00				22.81	25.11	< 33.01
2505.00	10	1	24	22.35	24.65	< 33.01
2535.00				22.35	24.65	< 33.01
2565.00				21.66	23.96	< 33.01
2505.00	10	1	49	22.65	24.95	< 33.01
2535.00				22.80	25.10	< 33.01
2565.00				22.17	24.47	< 33.01
2505.00	10	50	0	21.45	23.75	< 33.01
2535.00				21.41	23.71	< 33.01
2565.00				20.78	23.08	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK						
2507.50	15	1	0	22.57	24.87	< 33.01
2535.00				22.06	24.36	< 33.01
2562.50				22.77	25.07	< 33.01
2507.50	15	1	37	22.06	24.36	< 33.01
2535.00				22.22	24.52	< 33.01
2562.50				21.60	23.90	< 33.01
2507.50	15	1	74	23.01	25.31	< 33.01
2535.00				22.77	25.07	< 33.01
2562.50				22.27	24.57	< 33.01
2507.50	15	75	0	21.26	23.56	< 33.01
2535.00				21.32	23.62	< 33.01
2562.50				20.79	23.09	< 33.01
2510.00	20	1	0	22.62	24.92	< 33.01
2535.00				22.68	24.98	< 33.01
2560.00				22.75	25.05	< 33.01
2510.00	20	1	49	22.22	24.52	< 33.01
2535.00				22.41	24.71	< 33.01
2560.00				21.69	23.99	< 33.01
2510.00	20	1	99	22.53	24.83	< 33.01
2535.00				23.07	25.37	< 33.01
2560.00				22.48	24.78	< 33.01
2510.00	20	100	0	21.16	23.46	< 33.01
2535.00				21.16	23.46	< 33.01
2560.00				20.64	22.94	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)						

A.2 Radiated Spurious Emissions Test Result

Test Site	SIP-AC3	Test Engineer	Yien Qian
Test Date	2022/10/08 ~ 2022/10/09	Test Band	GSM 850_GPRS

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
676.0	35.3	26.4	61.7	82.3	-20.6	Peak	Horizontal
977.7	34.4	30.0	64.4	82.3	-17.9	Peak	Horizontal
729.4	35.0	27.3	62.3	82.3	-20.0	Peak	Vertical
998.1	35.5	30.3	65.8	82.3	-16.5	Peak	Vertical
1648.0	71.8	-17.7	54.1	82.3	-28.2	Peak	Horizontal
2420.0	59.2	-14.6	44.6	82.3	-37.7	Peak	Horizontal
2440.0	57.1	-14.7	42.4	82.3	-39.9	Peak	Vertical
7268.0	49.7	-5.7	44.0	82.3	-38.3	Peak	Vertical
Middle Channel							
696.4	36.5	26.8	63.3	82.3	-19.0	Peak	Horizontal
930.6	35.7	29.8	65.5	82.3	-16.8	Peak	Horizontal
750.7	35.5	28.0	63.5	82.3	-18.8	Peak	Vertical
931.6	35.8	29.8	65.6	82.3	-16.7	Peak	Vertical
1672.0	64.0	-17.5	46.5	82.3	-35.8	Peak	Horizontal
4184.0	54.9	-9.1	45.8	82.3	-36.5	Peak	Horizontal
1672.0	57.7	-17.5	40.2	82.3	-42.1	Peak	Vertical
7424.0	50.7	-5.5	45.2	82.3	-37.1	Peak	Vertical
High Channel							
766.2	35.2	28.1	63.3	82.3	-19.0	Peak	Horizontal
961.7	35.9	29.9	65.8	82.3	-16.5	Peak	Horizontal
743.0	35.9	27.8	63.7	82.3	-18.6	Peak	Vertical
931.1	35.6	29.8	65.4	82.3	-16.9	Peak	Horizontal
2548.0	61.7	-14.1	47.6	82.3	-34.7	Peak	Horizontal
8364.0	49.2	-4.0	45.2	82.3	-37.1	Peak	Vertical
4244.0	52.9	-9.1	43.8	82.3	-38.5	Peak	Vertical
8456.0	49.5	-3.9	45.6	82.3	-36.7	Peak	Horizontal

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Test Site	SIP-AC3	Test Engineer	Yien Qian
Test Date	2022/10/08 ~ 2022/10/09	Test Band	PCS 1900_GPRS

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
661.5	36.0	26.2	62.2	82.3	-20.1	Peak	Horizontal
846.3	35.2	28.9	64.1	82.3	-18.2	Peak	Horizontal
728.9	35.8	27.3	63.1	82.3	-19.2	Peak	Vertical
945.2	35.8	29.9	65.7	82.3	-16.6	Peak	Vertical
5547.5	55.5	-8.2	47.3	82.3	-35.0	Peak	Horizontal
15373.5	45.9	4.3	50.2	82.3	-32.1	Peak	Horizontal
5547.5	65.6	-8.2	57.4	82.3	-24.9	Peak	Vertical
16274.5	46.6	4.3	50.9	82.3	-31.4	Peak	Vertical
Middle Channel							
623.6	36.1	25.8	61.9	82.3	-20.4	Peak	Horizontal
857.9	35.5	28.8	64.3	82.3	-18.0	Peak	Horizontal
804.1	35.9	28.5	64.4	82.3	-17.9	Peak	Vertical
946.2	35.1	29.9	65.0	82.3	-17.3	Peak	Vertical
5641.0	61.7	-8.1	53.6	82.3	-28.7	Peak	Horizontal
15892.0	46.8	4.2	51.0	82.3	-31.3	Peak	Horizontal
5641.0	62.8	-8.1	54.7	82.3	-27.6	Peak	Vertical
7519.5	58.6	-5.6	53.0	82.3	-29.3	Peak	Vertical
High Channel							
775.0	35.9	28.1	64.0	82.3	-18.3	Peak	Horizontal
945.7	35.7	29.9	65.6	82.3	-16.7	Peak	Horizontal
791.9	35.2	28.3	63.5	82.3	-18.8	Peak	Vertical
957.8	35.1	29.9	65.0	82.3	-17.3	Peak	Vertical
5726.0	57.5	-8.0	49.5	82.3	-32.8	Peak	Horizontal
7638.5	53.7	-5.5	48.2	82.3	-34.1	Peak	Horizontal
7638.5	60.5	-5.5	55.0	82.3	-27.3	Peak	Vertical
13367.5	55.0	-0.6	54.4	82.3	-27.9	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							

Test Site	SIP-AC3	Test Engineer	Yien Qian
Test Date	2022/10/08 ~ 2022/10/09	Test Band	LTE Band 5, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
672.1	36.5	26.3	62.8	82.3	-19.5	Peak	Horizontal
870.0	39.7	28.8	68.5	82.3	-13.8	Peak	Horizontal
744.4	35.9	27.8	63.7	82.3	-18.6	Peak	Vertical
869.5	40.6	28.8	69.4	82.3	-12.9	Peak	Vertical
1648.0	66.3	-17.7	48.6	82.3	-33.7	Peak	Horizontal
1768.0	73.6	-17.0	56.6	82.3	-25.7	Peak	Horizontal
1768.0	66.1	-17.0	49.1	82.3	-33.2	Peak	Vertical
6760.0	51.1	-6.4	44.7	82.3	-37.6	Peak	Vertical
Middle Channel							
725.5	35.5	27.1	62.6	82.3	-19.7	Peak	Horizontal
882.1	40.0	28.8	68.8	82.3	-13.5	Peak	Horizontal
714.3	35.8	26.9	62.7	82.3	-19.6	Peak	Vertical
881.7	39.7	28.8	68.5	82.3	-13.8	Peak	Vertical
1672.0	66.2	-17.5	48.7	82.3	-33.6	Peak	Horizontal
8344.0	49.2	-4.0	45.2	82.3	-37.1	Peak	Horizontal
2420.0	57.9	-14.6	43.3	82.3	-39.0	Peak	Vertical
7680.0	50.3	-5.3	45.0	82.3	-37.3	Peak	Vertical
High Channel							
723.6	36.0	27.1	63.1	82.3	-19.2	Peak	Horizontal
893.3	40.5	29.0	69.5	82.3	-12.8	Peak	Horizontal
725.5	36.4	27.1	63.5	82.3	-18.8	Peak	Vertical
893.8	41.0	29.0	70.0	82.3	-12.3	Peak	Vertical
1696.0	61.0	-17.5	43.5	82.3	-38.8	Peak	Horizontal
2440.0	57.3	-14.7	42.6	82.3	-39.7	Peak	Horizontal
6560.0	49.8	-6.7	43.1	82.3	-39.2	Peak	Vertical
8472.0	49.6	-3.7	45.9	82.3	-36.4	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							

Test Site	SIP-AC3	Test Engineer	Yien Qian
Test Date	2022/10/08 ~ 2022/10/09	Test Band	LTE Band 7, 1RB, QPSK

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
724.0	36.6	27.1	63.7	70.3	-6.6	Peak	Horizontal
980.1	35.7	30.1	65.8	70.3	-4.5	Peak	Horizontal
678.4	36.5	26.4	62.9	70.3	-7.4	Peak	Vertical
923.4	35.4	29.7	65.1	70.3	-5.2	Peak	Vertical
7502.5	53.5	-5.6	47.9	70.3	-22.4	Peak	Horizontal
15390.5	46.2	4.3	50.5	70.3	-19.8	Peak	Horizontal
7502.5	62.9	-5.6	57.3	70.3	-13.0	Peak	Vertical
10001.5	57.2	-2.2	55.0	70.3	-15.3	Peak	Vertical
Middle Channel							
734.2	35.7	27.5	63.2	70.3	-7.1	Peak	Horizontal
961.2	35.1	29.9	65.0	70.3	-5.3	Peak	Horizontal
832.2	35.3	28.8	64.1	70.3	-6.2	Peak	Vertical
997.1	35.8	30.3	66.1	70.3	-4.2	Peak	Vertical
3550.0	59.0	-10.8	48.2	70.3	-22.1	Peak	Horizontal
7596.0	54.6	-5.4	49.2	70.3	-21.1	Peak	Horizontal
7596.0	58.4	-5.4	53.0	70.3	-17.3	Peak	Vertical
10129.0	51.9	-2.8	49.1	70.3	-21.2	Peak	Vertical
High Channel							
699.3	35.5	26.8	62.3	70.3	-8.0	Peak	Horizontal
930.6	35.1	29.8	64.9	70.3	-5.4	Peak	Horizontal
776.4	35.6	28.1	63.7	70.3	-6.6	Peak	Vertical
991.8	36.1	30.3	66.4	70.3	-3.9	Peak	Vertical
7698.0	53.8	-5.4	48.4	70.3	-21.9	Peak	Horizontal
14013.5	48.0	2.0	50.0	70.3	-20.3	Peak	Horizontal
7698.0	64.1	-5.4	58.7	70.3	-11.6	Peak	Vertical
10265.0	57.7	-2.4	55.3	70.3	-15.0	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).							

Appendix B - Test Setup Photograph

Refer to “2210RSU057-UT” file.

Appendix C - EUT Photograph

Refer to “2210RSU057-UE” file.

The End