RF MEASUREMENT REPORT

FCC ID:	XMR202111EG915ULA
Application:	Quectel Wireless Solutions Company Limited
Product:	LTE Module
Model No.:	EG915U-LA
Brand Name:	Quectel
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	Part 22 (H), 24 (E), 27
Result:	Complies
Test Date:	April 18 ~ 26, 2022

Reviewed By: Sunny Sun

Approved By: Robin Wu

Revision History

Report No.	Version	Description	Issue Date	Note
2204RSU026-U2	Rev. 01	Initial Report	05-13-2022	Valid

Note: This report is supplement to FCC ID “XMR202111EG915ULA” updating PCB laminated structure change and related data.

CONTENTS

1. GENERAL INFORMATION

1.1. Applicant

Quectel Wireless Solutions Company Limited

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

1.2. Manufacturer

Quectel Wireless Solutions Company Limited

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

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.	EG915U-LA
Brand Name	Quectel
IMEI	865413050018992
Operating Temperature	-35 ~ 75 °C
Power Type	3.3 ~ 4.3Vdc, typical 3.8Vdc
Bluetooth Specification	V4.2 single mode for BR/EDR
Wi-Fi Specification	802.11b scan mode
GSM Band	GSM 850, PCS 1900
E-UTRA Band	Band 2, 4, 5, 7, 66

Note: 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.

1.5. Product Specification under Test

FDD T_X Frequency Range	Band 2: 1850 ~ 1910 MHz; Band 4: 1710 ~ 1755 MHz Band 5: 824 ~ 849 MHz; Band 7: 2500 ~ 2570 MHz Band 66: 1710 ~ 1780 MHz
FDD R_X Frequency Range	Band 2: 1930 ~ 1990 MHz; Band 4: 2110 ~ 2155 MHz Band 5: 869 ~ 894 MHz; Band 7: 2620 ~ 2690 MHz Band 66: 2110 ~ 2180 MHz
Modulation	UL apply to QPSK, DL up to 64QAM

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

1.6. 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 22, 24, 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

1.7. Device Capabilities

This device contains the following capabilities:

Working on LTE Band 2, 4, 5, 7, 66; LTE Module.

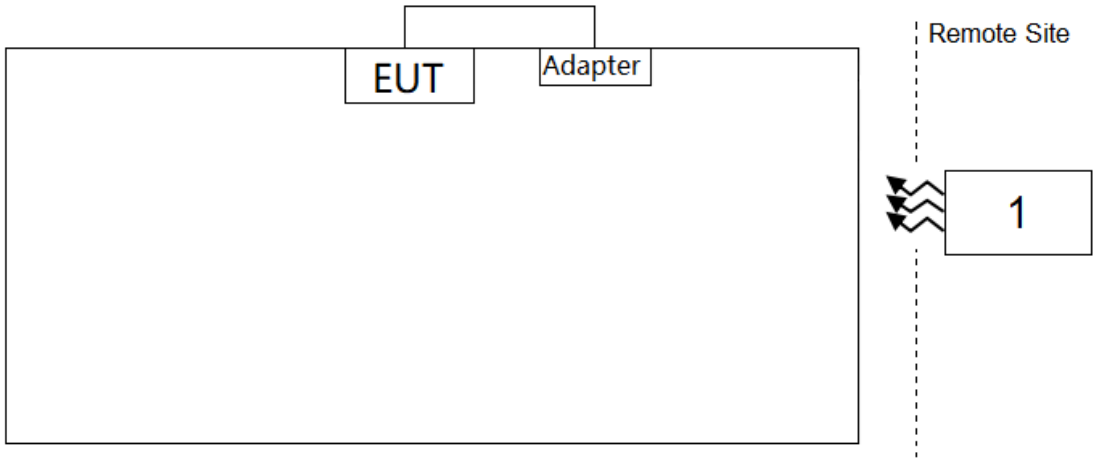
LTE Band 66 (1710 ~ 1780 MHz) overlaps the entire frequency range of LTE Band 4 (1710 ~ 1755 MHz).

Therefore, test data provided in this report covers Band 4 as well as Band 66.

1.8. EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

1.9. Configuration of Tested System



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

1.10. Test Environment Condition

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

2. TEST EQUIPMENT CALIBRATION DATE

Instrument	Manufacturer	Model No.	Asset No.	Last Cali. Date	Cali. Due Date	Test Site
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2022/5/24	WZ-AC2
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2022/10/28	WZ-AC2
Communication Tester	R&S	CMW500	MRTSUE06108	1 year	2023/4/6	WZ-SR3
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2022/6/24	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2022/12/1	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2022/10/21	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2022/11/12	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2022/4/20	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2023/4/21	WZ-AC2
Horn Antenna	ETS	3117	MRTSUE06257	1 year	2022/9/25	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE06362	1 year	2023/2/15	WZ-SR6
Shielding Room	HUAMING	WZ-SR6	MRTSUE06443	/	/	WZ-SR6
Signal Analyzer	Keysight	N9020B	MRTSUE06583	1 year	2022/10/10	WZ-SR6
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2022/12/1	WZ-AC2
Signal Generator	Keysight	N5173B	MRTSUE06606	1 year	2022/11/29	WZ-SR6
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2023/1/13	WZ-AC2
5G Wireless Test Platform	Keysight	E7515B	MRTSUE06942	1 year	2023/3/3	WZ-SR6
Radio Communication Analyzer	Anritsu	MT8821C	MRTSUE06960	1 year	2022/7/1	WZ-SR6
Radio Communication Test Station	Anritsu	MT8000A	MRTSUE06961	1 year	2022/7/1	WZ-SR6
Preamplifier	EMCI	EMC051845SE	MRTSUE06987	1 year	2022/9/9	WZ-AC2
Thermohygrometer	testo	Testo 608-H1	MRTSUE11038	1 year	2022/11/11	WZ-AC2

Software	Version	Function
EMI Software	V3	EMI Test Software

3. 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.

Radiated Spurious Emissions
Measurement Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): Horizontal: 9kHz ~ 300MHz: 5.04dB 300MHz ~ 1GHz: 4.95dB 1GHz ~ 40GHz: 6.40dB Vertical: 9kHz ~ 300MHz: 5.24dB 300MHz ~ 1GHz: 6.03dB 1GHz ~ 40GHz: 6.40dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.13dB

4. TEST RESULT

4.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Verdict
22.913(a)(5)	Equivalent Radiated Power (Band 5)	Conducted	Pass
24.232(c) 27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2, 7)		
27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4/66)		
2.1053, 22.917(a) 24.238(a), 27.53 (h)	Spurious Emissions (Band 2, 4/66, 5)	Radiated	Pass
27.53(m)	Spurious Emissions (Band 7)		

Remark: 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.

4.2. Equivalent Isotropically Radiated Power Measurement

4.2.1. Test Limit

Band 5

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

Band 2

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.

Band 4/66:

Fixed, mobile stations operating in the 1710-1755 MHz band and mobile in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

4.2.2. Test Procedures Used

ANSI C63.26-2015 - Section 5.2

4.2.3. 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

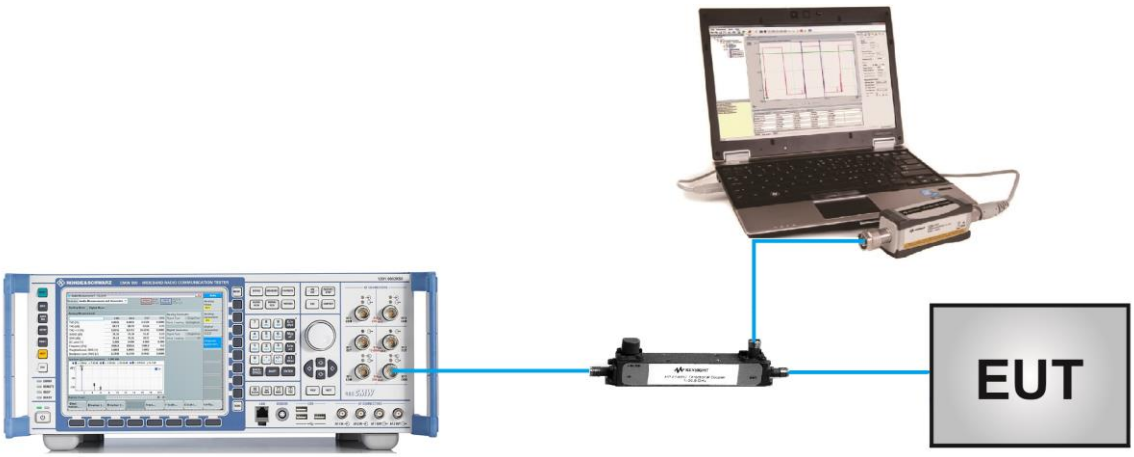
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

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

4.2.4. Test Setup



4.2.5. Test Result

Refer to Appendix A.1.

4.3. Radiated Spurious Emissions Measurements

4.3.1. 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 Band 7, the powerof any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. The emission limit equal to -25dBm.

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.

4.3.2. Test Procedure Used

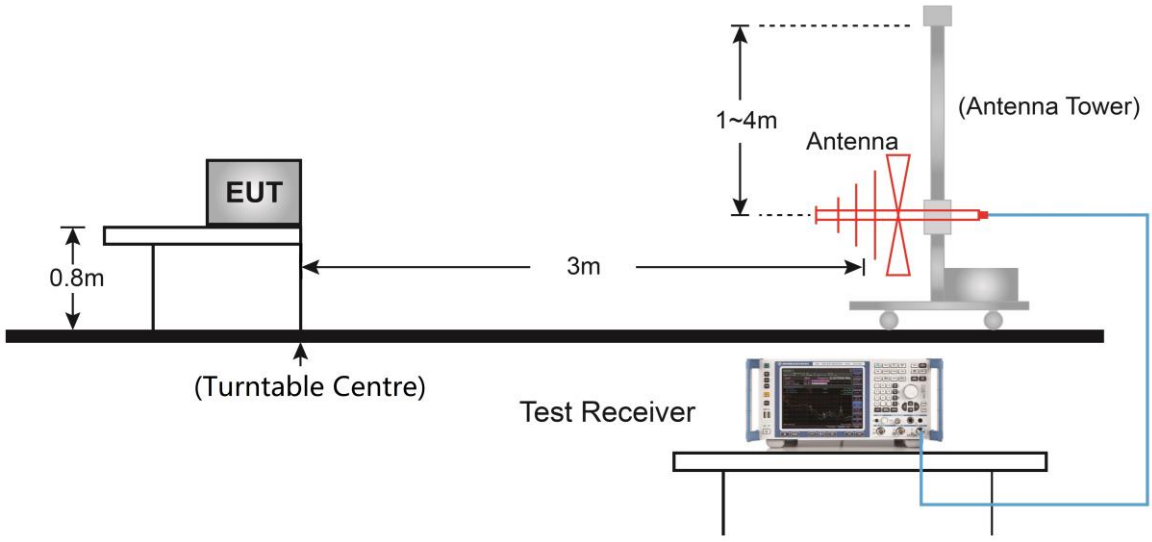
ANSI C63.26-2015 - Section 5.2.7 & 5.5

4.3.3. Test Setting

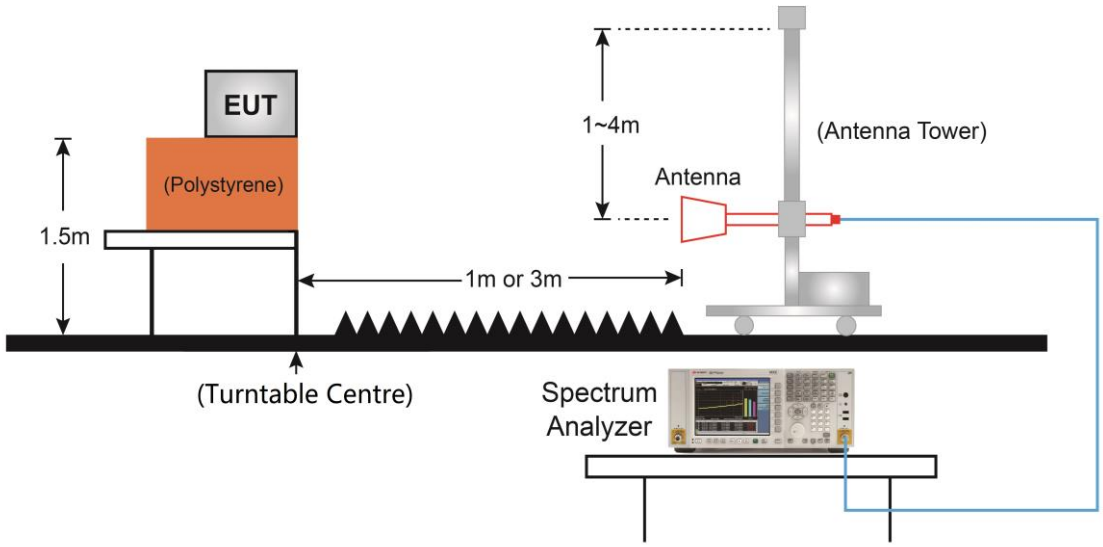
1. RBW = 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

4.3.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3.5. Test Result

Refer to Appendix A.2.

Appendix A – Test Result

A.1 Equivalent Isotropically Radiated Power Test Result

Test Site	WZ-SR6	Test Engineer	Caitlin Chen
Test Band	LTE Band 2	Test Date	2022/04/19

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
18607	1850.70	1.4	1	0	21.85	23.44	< 33.01
18900	1880.00				22.02	23.61	< 33.01
19193	1909.30				21.71	23.30	< 33.01
18607	1850.70	1.4	1	2	22.52	24.11	< 33.01
18900	1880.00				22.77	24.36	< 33.01
19193	1909.30				22.36	23.95	< 33.01
18607	1850.70	1.4	1	6	21.75	23.34	< 33.01
18900	1880.00				21.98	23.57	< 33.01
19193	1909.30				21.53	23.12	< 33.01
18607	1850.70	1.4	6	0	21.33	22.92	< 33.01
18900	1880.00				21.66	23.25	< 33.01
19193	1909.30				21.17	22.76	< 33.01
18615	1851.50	3	1	0	22.16	23.75	< 33.01
18900	1880.00				21.93	23.52	< 33.01
19185	1908.50				22.16	23.75	< 33.01
18615	1851.50	3	1	7	22.91	24.50	< 33.01
18900	1880.00				23.28	24.87	< 33.01
19185	1908.50				22.90	24.49	< 33.01
18615	1851.50	3	1	14	21.17	22.76	< 33.01
18900	1880.00				21.47	23.06	< 33.01
19185	1908.50				21.12	22.71	< 33.01
18615	1851.50	3	15	0	21.38	22.97	< 33.01
18900	1880.00				21.68	23.27	< 33.01
19185	1908.50				21.59	23.18	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
18625	1852.50	5	1	0	22.18	23.77	< 33.01
18900	1880.00				22.13	23.72	< 33.01
19175	1907.50				22.20	23.79	< 33.01
18625	1852.50	5	1	12	22.36	23.95	< 33.01
18900	1880.00				22.62	24.21	< 33.01
19175	1907.50				22.40	23.99	< 33.01
18625	1852.50	5	1	24	22.21	23.80	< 33.01
18900	1880.00				22.54	24.13	< 33.01
19175	1907.50				22.07	23.66	< 33.01
18625	1852.50	5	25	0	21.45	23.04	< 33.01
18900	1880.00				21.82	23.41	< 33.01
19175	1907.50				21.54	23.13	< 33.01
18650	1855.00	10	1	0	22.11	23.70	< 33.01
18900	1880.00				22.13	23.72	< 33.01
19150	1905.00				21.91	23.50	< 33.01
18650	1855.00	10	1	24	22.43	24.02	< 33.01
18900	1880.00				22.79	24.38	< 33.01
19150	1905.00				22.64	24.23	< 33.01
18650	1855.00	10	1	49	21.85	23.44	< 33.01
18900	1880.00				22.10	23.69	< 33.01
19150	1905.00				21.73	23.32	< 33.01
18650	1855.00	10	50	0	21.48	23.07	< 33.01
18900	1880.00				21.76	23.35	< 33.01
19150	1905.00				21.60	23.19	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
18675	1857.50	15	1	0	22.51	24.10	< 33.01
18900	1880.00				22.37	23.96	< 33.01
19125	1902.50				22.53	24.12	< 33.01
18675	1857.50	15	1	37	22.31	23.90	< 33.01
18900	1880.00				22.61	24.20	< 33.01
19125	1902.50				22.63	24.22	< 33.01
18675	1857.50	15	1	74	21.95	23.54	< 33.01
18900	1880.00				22.63	24.22	< 33.01
19125	1902.50				22.29	23.88	< 33.01
18675	1857.50	15	75	0	21.49	23.08	< 33.01
18900	1880.00				21.77	23.36	< 33.01
19125	1902.50				21.61	23.20	< 33.01
18700	1860.00	20	1	0	22.37	23.96	< 33.01
18900	1880.00				22.13	23.72	< 33.01
19100	1900.00				22.53	24.12	< 33.01
18700	1860.00	20	1	49	22.56	24.15	< 33.01
18900	1880.00				22.90	24.49	< 33.01
19100	1900.00				22.81	24.40	< 33.01
18700	1860.00	20	1	99	22.37	23.96	< 33.01
18900	1880.00				22.19	23.78	< 33.01
19100	1900.00				22.02	23.61	< 33.01
18700	1860.00	20	100	0	21.52	23.11	< 33.01
18900	1880.00				21.54	23.13	< 33.01
19100	1900.00				21.56	23.15	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Test Site	WZ-SR6	Test Engineer	Caitlin Chen
Test Band	LTE Band 4/66	Test Date	2022/04/19

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
131979	1710.70	1.4	1	0	22.10	24.10	< 30.00
132322	1745.00				22.24	24.24	< 30.00
132665	1779.30				21.96	23.96	< 30.00
131979	1710.70	1.4	1	2	22.84	24.84	< 30.00
132322	1745.00				22.92	24.92	< 30.00
132665	1779.30				22.63	24.63	< 30.00
131979	1710.70	1.4	1	6	22.09	24.09	< 30.00
132322	1745.00				22.12	24.12	< 30.00
132665	1779.30				21.83	23.83	< 30.00
131979	1710.70	1.4	6	0	21.59	23.59	< 30.00
132322	1745.00				21.72	23.72	< 30.00
132665	1779.30				21.44	23.44	< 30.00
131987	1711.50	3	1	0	22.21	24.21	< 30.00
132322	1745.00				22.34	24.34	< 30.00
132657	1778.50				21.48	23.48	< 30.00
131987	1711.50	3	1	7	23.31	25.31	< 30.00
132322	1745.00				23.36	25.36	< 30.00
132657	1778.50				22.95	24.95	< 30.00
131987	1711.50	3	1	14	21.51	23.51	< 30.00
132322	1745.00				21.52	23.52	< 30.00
132657	1778.50				21.78	23.78	< 30.00
131987	1711.50	3	15	0	21.69	23.69	< 30.00
132322	1745.00				21.80	23.80	< 30.00
132657	1778.50				21.52	23.52	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
131997	1712.50	5	1	0	22.30	24.30	< 30.00
132322	1745.00				22.49	24.49	< 30.00
132647	1777.50				21.64	23.64	< 30.00
131997	1712.50	5	1	12	22.53	24.53	< 30.00
132322	1745.00				22.63	24.63	< 30.00
132647	1777.50				22.38	24.38	< 30.00
131997	1712.50	5	1	24	21.45	23.45	< 30.00
132322	1745.00				21.48	23.48	< 30.00
132647	1777.50				21.82	23.82	< 30.00
131997	1712.50	5	25	0	21.65	23.65	< 30.00
132322	1745.00				21.78	23.78	< 30.00
132647	1777.50				21.48	23.48	< 30.00
132022	1715.00	10	1	0	22.42	24.42	< 30.00
132322	1745.00				22.18	24.18	< 30.00
132622	1775.00				21.67	23.67	< 30.00
132022	1715.00	10	1	24	22.60	24.60	< 30.00
132322	1745.00				22.81	24.81	< 30.00
132622	1775.00				22.68	24.68	< 30.00
132022	1715.00	10	1	49	21.19	23.19	< 30.00
132322	1745.00				21.28	23.28	< 30.00
132622	1775.00				22.19	24.19	< 30.00
132022	1715.00	10	50	0	21.62	23.62	< 30.00
132322	1745.00				21.85	23.85	< 30.00
132622	1775.00				21.65	23.65	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
132047	1717.50	15	1	0	22.63	24.63	< 30.00
132322	1745.00				22.19	24.19	< 30.00
132597	1772.50				22.34	24.34	< 30.00
132047	1717.50	15	1	37	22.40	24.40	< 30.00
132322	1745.00				22.84	24.84	< 30.00
132597	1772.50				22.65	24.65	< 30.00
132047	1717.50	15	1	74	22.17	24.17	< 30.00
132322	1745.00				21.53	23.53	< 30.00
132597	1772.50				22.04	24.04	< 30.00
132047	1717.50	15	75	0	21.84	23.84	< 30.00
132322	1745.00				21.88	23.88	< 30.00
132597	1772.50				21.76	23.76	< 30.00
132072	1720.00	20	1	0	22.68	24.68	< 30.00
132322	1745.00				22.05	24.05	< 30.00
132572	1770.00				22.49	24.49	< 30.00
132072	1720.00	20	1	49	22.90	24.90	< 30.00
132322	1745.00				23.02	25.02	< 30.00
132572	1770.00				22.92	24.92	< 30.00
132072	1720.00	20	1	99	22.29	24.29	< 30.00
132322	1745.00				20.94	22.94	< 30.00
132572	1770.00				22.31	24.31	< 30.00
132072	1720.00	20	100	0	21.80	23.80	< 30.00
132322	1745.00				21.69	23.69	< 30.00
132572	1770.00				21.71	23.71	< 30.00
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Test Site	WZ-SR6	Test Engineer	Caitlin Chen
Test Band	LTE Band 5	Test Date	2022/04/19

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK							
20407	824.70	1.4	1	0	22.32	22.70	< 38.45
20525	836.50				22.42	22.80	< 38.45
20643	848.30				22.01	22.39	< 38.45
20407	824.70	1.4	1	2	22.90	23.28	< 38.45
20525	836.50				22.89	23.27	< 38.45
20643	848.30				22.43	22.81	< 38.45
20407	824.70	1.4	1	6	22.24	22.62	< 38.45
20525	836.50				22.27	22.65	< 38.45
20643	848.30				21.81	22.19	< 38.45
20407	824.70	1.4	6	0	21.63	22.01	< 38.45
20525	836.50				21.60	21.98	< 38.45
20643	848.30				21.02	21.40	< 38.45
20415	825.50	3	1	0	22.26	22.64	< 38.45
20525	836.50				22.26	22.64	< 38.45
20635	846.50				22.14	22.52	< 38.45
20415	825.50	3	1	7	23.32	23.70	< 38.45
20525	836.50				23.25	23.63	< 38.45
20635	846.50				22.84	23.22	< 38.45
20415	825.50	3	1	14	22.21	22.59	< 38.45
20525	836.50				22.04	22.42	< 38.45
20635	846.50				21.91	22.29	< 38.45
20415	825.50	3	15	0	21.79	22.17	< 38.45
20525	836.50				21.72	22.10	< 38.45
20635	846.50				21.32	21.70	< 38.45
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	ERP (dBm)	Limit (dBm)
QPSK							
20425	826.50	5	1	0	22.41	22.79	< 38.45
20525	836.50				22.44	22.82	< 38.45
20625	846.50				22.42	22.80	< 38.45
20425	826.50	5	1	12	22.62	23.00	< 38.45
20525	836.50				22.57	22.95	< 38.45
20625	846.50				22.33	22.71	< 38.45
20425	826.50	5	1	24	22.45	22.83	< 38.45
20525	836.50				22.51	22.89	< 38.45
20625	846.50				22.00	22.38	< 38.45
20425	826.50	5	25	0	21.76	22.14	< 38.45
20525	836.50				21.71	22.09	< 38.45
20625	846.50				21.43	21.81	< 38.45
20450	829.00	10	1	0	22.55	22.93	< 38.45
20525	836.50				22.44	22.82	< 38.45
20600	844.00				22.03	22.41	< 38.45
20450	829.00	10	1	24	22.67	23.05	< 38.45
20525	836.50				22.79	23.17	< 38.45
20600	844.00				22.75	23.13	< 38.45
20450	829.00	10	1	49	21.09	21.47	< 38.45
20525	836.50				22.67	23.05	< 38.45
20600	844.00				22.02	22.40	< 38.45
20450	829.00	10	50	0	21.72	22.10	< 38.45
20525	836.50				21.84	22.22	< 38.45
20600	844.00				21.74	22.12	< 38.45
Note: The ERP (dBm) = Output Power (dBm) + Antenna Gain (dBi) - 2.15							

Test Site	WZ-SR6	Test Engineer	Caitlin Chen
Test Band	LTE Band 7	Test Date	2022/04/19

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
20775	2502.50	5	1	0	22.18	25.18	< 33.01
21100	2535.00				22.33	25.33	< 33.01
21425	2567.50				22.29	25.29	< 33.01
20775	2502.50	5	1	12	22.91	25.91	< 33.01
21100	2535.00				22.91	25.91	< 33.01
21425	2567.50				22.67	25.67	< 33.01
20775	2502.50	5	1	24	22.40	25.40	< 33.01
21100	2535.00				22.03	25.03	< 33.01
21425	2567.50				22.08	25.08	< 33.01
20775	2502.50	5	25	0	22.06	25.06	< 33.01
21100	2535.00				22.06	25.06	< 33.01
21425	2567.50				21.82	24.82	< 33.01
20800	2505.00	10	1	0	22.38	25.38	< 33.01
21100	2535.00				22.56	25.56	< 33.01
21400	2565.00				22.47	25.47	< 33.01
20800	2505.00	10	1	24	23.24	26.24	< 33.01
21100	2535.00				23.16	26.16	< 33.01
21400	2565.00				22.78	25.78	< 33.01
20800	2505.00	10	1	49	22.59	25.59	< 33.01
21100	2535.00				21.65	24.65	< 33.01
21400	2565.00				21.46	24.46	< 33.01
20800	2505.00	10	50	0	22.31	25.31	< 33.01
21100	2535.00				22.22	25.22	< 33.01
21400	2565.00				21.89	24.89	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	RB Size	RB Offset	Output Power (dBm)	EIRP (dBm)	Limit (dBm)
QPSK							
20825	2507.50	15	1	0	22.56	25.56	< 33.01
21100	2535.00				22.83	25.83	< 33.01
21375	2562.50				22.78	25.78	< 33.01
20825	2507.50	15	1	37	23.24	26.24	< 33.01
21100	2535.00				23.04	26.04	< 33.01
21375	2562.50				22.80	25.80	< 33.01
20825	2507.50	15	1	74	22.70	25.70	< 33.01
21100	2535.00				22.08	25.08	< 33.01
21375	2562.50				22.05	25.05	< 33.01
20825	2507.50	15	75	0	22.32	25.32	< 33.01
21100	2535.00				22.19	25.19	< 33.01
21375	2562.50				21.94	24.94	< 33.01
20850	2510.00	20	1	0	22.51	25.51	< 33.01
21100	2535.00				23.11	26.11	< 33.01
21350	2560.00				22.83	25.83	< 33.01
20850	2510.00	20	1	49	23.48	26.48	< 33.01
21100	2535.00				23.25	26.25	< 33.01
21350	2560.00				23.09	26.09	< 33.01
20850	2510.00	20	1	99	22.74	25.74	< 33.01
21100	2535.00				22.17	25.17	< 33.01
21350	2560.00				22.22	25.22	< 33.01
20850	2510.00	20	100	0	22.20	25.20	< 33.01
21100	2535.00				22.08	25.08	< 33.01
21350	2560.00				21.87	24.87	< 33.01
Note: The EIRP (dBm) = Output Power (dBm) + Antenna Gain (dBi)							

A.2 Radiated Spurious Emissions Test Result

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Band	LTE Band 2 1RB, QPSK	Test Date	2022/04/23

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
149.31	13.76	15.30	29.06	82.30	-53.24	Peak	Horizontal
432.07	5.12	23.89	29.01	82.30	-53.29	Peak	Horizontal
43.58	16.63	20.41	37.04	82.30	-45.26	Peak	Vertical
425.76	10.12	23.93	34.05	82.30	-48.25	Peak	Vertical
3703.00	52.55	-0.23	52.32	82.30	-29.98	Peak	Horizontal
9525.50	33.92	13.83	47.75	82.30	-34.55	Peak	Horizontal
3703.00	52.07	-0.23	51.84	82.30	-30.46	Peak	Vertical
9219.50	32.66	14.40	47.06	82.30	-35.24	Peak	Vertical
Middle Channel							
148.34	13.53	15.26	28.79	82.30	-53.51	Peak	Horizontal
432.07	5.81	23.89	29.70	82.30	-52.60	Peak	Horizontal
43.58	16.10	20.41	36.51	82.30	-45.79	Peak	Vertical
432.07	9.68	23.89	33.57	82.30	-48.73	Peak	Vertical
3762.50	52.98	-0.14	52.84	82.30	-29.46	Peak	Horizontal
8276.00	33.79	11.37	45.16	82.30	-37.14	Peak	Horizontal
3762.50	52.93	-0.14	52.79	82.30	-29.51	Peak	Vertical
7375.00	32.59	11.52	44.11	82.30	-38.19	Peak	Vertical
High Channel							
148.83	13.41	15.27	28.68	82.30	-53.62	Peak	Horizontal
426.25	6.96	23.93	30.89	82.30	-51.41	Peak	Horizontal
43.10	16.76	20.28	37.04	82.30	-45.26	Peak	Vertical
431.58	8.42	23.90	32.32	82.30	-49.98	Peak	Vertical
3822.00	54.72	0.04	54.76	82.30	-27.54	Peak	Horizontal
7086.00	32.44	10.85	43.29	82.30	-39.01	Peak	Horizontal
3822.00	56.03	0.04	56.07	82.30	-26.23	Peak	Vertical
7910.50	32.85	11.39	44.24	82.30	-38.06	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Band	LTE Band 4/66, 1RB, QPSK	Test Date	2022/04/23

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
150.28	13.22	15.34	28.56	82.30	-53.74	Peak	Horizontal
426.25	6.28	23.93	30.21	82.30	-52.09	Peak	Horizontal
44.07	14.89	20.52	35.41	82.30	-46.89	Peak	Vertical
433.04	8.62	23.88	32.50	82.30	-49.80	Peak	Vertical
5054.50	35.99	3.89	39.88	82.30	-42.42	Peak	Horizontal
9092.00	32.52	13.63	46.15	82.30	-36.15	Peak	Horizontal
7230.50	32.68	11.38	44.06	82.30	-38.24	Peak	Vertical
12160.50	31.90	17.45	49.35	82.30	-32.95	Peak	Vertical
Middle Channel							
149.80	12.82	15.32	28.14	82.30	-54.16	Peak	Horizontal
432.55	5.76	23.89	29.65	82.30	-52.65	Peak	Horizontal
44.07	15.80	20.52	36.32	82.30	-45.98	Peak	Vertical
425.76	8.49	23.93	32.42	82.30	-49.88	Peak	Vertical
4850.50	35.79	3.79	39.58	82.30	-42.72	Peak	Horizontal
8650.00	33.19	12.90	46.09	82.30	-36.21	Peak	Horizontal
7953.00	33.67	11.70	45.37	82.30	-36.93	Peak	Vertical
14872.00	32.03	20.59	52.62	82.30	-29.68	Peak	Vertical
High Channel							
44.07	15.99	20.52	36.51	82.30	-45.79	Peak	Horizontal
432.55	8.63	23.89	32.52	82.30	-49.78	Peak	Horizontal
44.07	15.85	20.52	36.37	82.30	-45.93	Peak	Vertical
432.07	9.57	23.89	33.46	82.30	-48.84	Peak	Vertical
4757.00	35.69	4.40	40.09	82.30	-42.21	Peak	Horizontal
9466.00	33.69	13.93	47.62	82.30	-34.68	Peak	Horizontal
4833.50	34.53	3.85	38.38	82.30	-43.92	Peak	Vertical
10316.00	33.04	15.29	48.33	82.30	-33.97	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Band	LTE Band 5, 1RB, QPSK	Test Date	2022/04/23

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
150.28	13.10	15.34	28.44	82.30	-53.86	Peak	Horizontal
432.55	6.88	23.89	30.77	82.30	-51.53	Peak	Horizontal
43.58	17.25	20.41	37.66	82.30	-44.64	Peak	Vertical
432.55	9.21	23.89	33.10	82.30	-49.20	Peak	Vertical
1646.00	47.26	-5.53	41.73	82.30	-40.57	Peak	Horizontal
3295.00	40.27	-1.77	38.50	82.30	-43.80	Peak	Horizontal
1646.00	44.87	-5.53	39.34	82.30	-42.96	Peak	Vertical
3295.00	44.01	-1.77	42.24	82.30	-40.06	Peak	Vertical
Middle Channel							
149.80	13.55	15.32	28.87	82.30	-53.43	Peak	Horizontal
438.37	8.22	23.94	32.16	82.30	-50.14	Peak	Horizontal
43.10	16.77	20.28	37.05	82.30	-45.25	Peak	Vertical
432.55	10.02	23.89	33.91	82.30	-48.39	Peak	Vertical
1671.50	45.96	-5.58	40.38	82.30	-41.92	Peak	Horizontal
3346.00	40.22	-1.80	38.42	82.30	-43.88	Peak	Horizontal
1671.50	45.11	-5.58	39.53	82.30	-42.77	Peak	Vertical
3346.00	41.01	-1.80	39.21	82.30	-43.09	Peak	Vertical
High Channel							
150.77	13.65	15.36	29.01	82.30	-53.29	Peak	Horizontal
432.55	6.96	23.89	30.85	82.30	-51.45	Peak	Horizontal
44.07	16.67	20.52	37.19	82.30	-45.11	Peak	Vertical
432.55	9.56	23.89	33.45	82.30	-48.85	Peak	Vertical
1697.00	40.50	-5.52	34.98	82.30	-47.32	Peak	Horizontal
3397.00	40.75	-1.53	39.22	82.30	-43.08	Peak	Horizontal
1697.00	41.36	-5.52	35.84	82.30	-46.46	Peak	Vertical
3397.00	40.78	-1.53	39.25	82.30	-43.05	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Test Site	WZ-AC2	Test Engineer	Bob Zhang
Test Band	LTE Band 7, 1RB, QPSK	Test Date	2022/04/23

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
148.34	12.90	15.26	28.16	70.30	-42.14	Peak	Horizontal
433.04	5.35	23.88	29.23	70.30	-41.07	Peak	Horizontal
43.10	16.32	20.28	36.60	70.30	-33.70	Peak	Vertical
426.73	9.34	23.93	33.27	70.30	-37.03	Peak	Vertical
4714.50	35.27	4.62	39.89	70.30	-30.41	Peak	Horizontal
9075.00	32.99	13.71	46.70	70.30	-23.60	Peak	Horizontal
5003.50	39.76	3.86	43.62	70.30	-26.68	Peak	Vertical
8463.00	33.18	11.86	45.04	70.30	-25.26	Peak	Vertical
Middle Channel							
149.80	13.24	15.32	28.56	70.30	-41.74	Peak	Horizontal
433.04	6.44	23.88	30.32	70.30	-39.98	Peak	Horizontal
43.58	17.30	20.41	37.71	70.30	-32.59	Peak	Vertical
426.73	8.03	23.93	31.96	70.30	-38.34	Peak	Vertical
4689.00	34.91	4.47	39.38	70.30	-30.92	Peak	Horizontal
8165.50	32.80	11.77	44.57	70.30	-25.73	Peak	Horizontal
5071.50	39.03	3.99	43.02	70.30	-27.28	Peak	Vertical
9398.00	33.04	14.18	47.22	70.30	-23.08	Peak	Vertical
High Channel							
150.28	13.96	15.34	29.30	70.30	-41.00	Peak	Horizontal
432.55	5.71	23.89	29.60	70.30	-40.70	Peak	Horizontal
44.07	17.81	20.52	38.33	70.30	-31.97	Peak	Vertical
433.04	7.69	23.88	31.57	70.30	-38.73	Peak	Vertical
5131.00	37.04	3.98	41.02	70.30	-29.28	Peak	Horizontal
9423.50	32.23	14.14	46.37	70.30	-23.93	Peak	Horizontal
5131.00	41.70	3.98	45.68	70.30	-24.62	Peak	Vertical
9457.50	33.15	13.97	47.12	70.30	-23.18	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Appendix B - Test Setup Photograph

Refer to “2204RSU026-UT” file.

Appendix C - EUT Photograph

Refer to “2204RSU026-UE” file.