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TEST REPORT

Application No.:	ZEWA2305000087RG
Applicant:	Quectel Wireless Solutions Co., Ltd.
Address of Applicant:	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233
Manufacturer:	Quectel Wireless Solutions Co., Ltd.
Address of Manufacturer:	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233
EUT Description:	LTE-A Cat 6 M.2 Module
Model No.:	EM060K-NA
Trade Mark:	Quectel
FCC ID:	XMR202307EM060KNA
Standards:	47 CFR Part 96.47
Date of Receipt:	2023/05/12
Date of Test:	2023/06/25 to 2023/06/25
Date of Issue:	2023/06/29
Test Result :	PASS *

In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

Ervon 21

Ervin Li Regulatory Manager



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1 Version

		Revision Record		
Version	Chapter	Date	Modifier	Remark
01		2023/06/29		Original

Prepared By	Dee . Zheng (Dee Zheng) / Test Engineer	
Checked By	Daniel Wang (Daniel Wang) / Reviewer	



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2 Test Summary

Test Item	FCC Rule No.	Test Result	Verdict
End User Device additional requiement	§96.47	Clause 4.1	Pass



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3 General Information

3.1 Details of Client

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

3.2 Test Location

Company:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch	
Address:	No. 1 Workshop, M-10, Middle section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China	
Post code:	518057	
Test engineer:	Dee Zheng	

3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch has been recognized as an accredited testing laboratory.

Designation Number: CN1336.

Test Firm Registration Number: 787754



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3.4 General Description of EUT

EUT Description:	LTE-A Cat 6 M.2 Module	
Model No.:	EM060K-NA	
Trade Mark:	Quectel	
Hardware Version:	R1.0	
Software Version:	EM060KNAAAR01A02M2G	
Power Supply:	3.8V(DC Supply)	
IMEI:	863550060001682	
Antenna Type:	🖾 External, 🗌 Integrated	
Transmitter Frequnecy Band:	LTE Band 48	
Transmitter Frequnecy Range:	3550 to 3700 MHz	
	LTE Band 48: -2.00dBi	
Antenna Gain:	Note: The antenna gain are derived from the gain information report provided by the manufacturer.	
Remark: As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.		



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3.5 Test Environment

Environment Parameter	101 kPa Selected Values During Tests	
Relative Humidity	44-46 % RH Ambient	
Value	Temperature(°C)	Voltage(V)
NTNV	22~23	3.7
Remark:		
NV: Normal Voltage NT: No	rmal Temperature	

3.6 Description of Support Units

Description	Manufacturer	Model No.
Mother board*	Quectel	N/A
Router	NETGEAR	R7800
Remark: the information with"*" are provided by client.		



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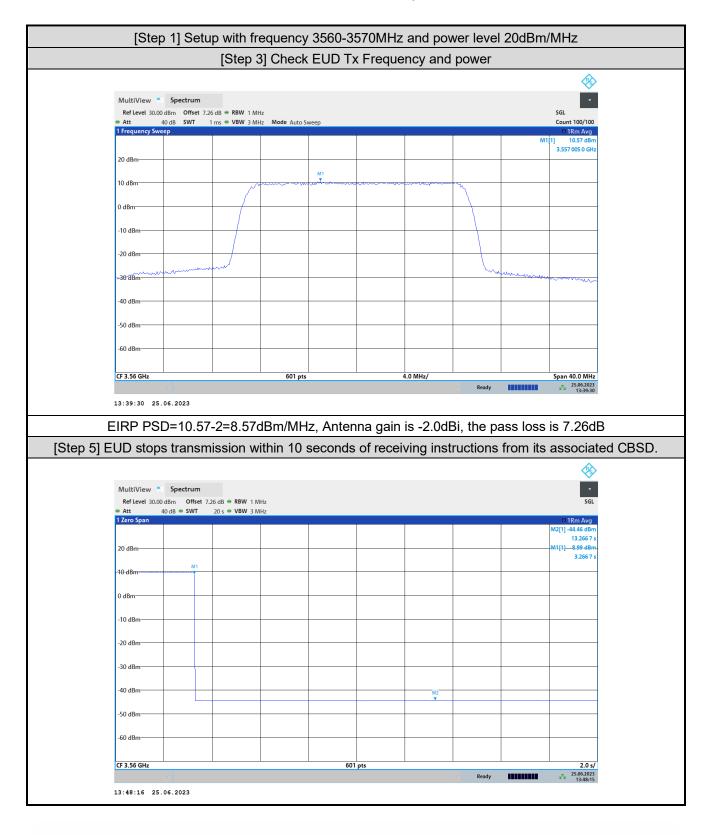
4 Description of Tests

4.1 End User Device additional requiement

Test Requirement:	FCC Part 96.47	
Test Method:	WINNF-18-IN-00178 CBRS End User Devices as UUT Test Guidelines	
Requirement:	 (a)End User Devices may operate only if they can positively receive and decode anauthorization signal transmitted by a CBSD, including the frequencies and power limits fortheir operation. (1)An End User Device must discontinue operations, change frequencies, or changeits operational power level within 10 seconds of receiving instructions from its associated CBSD. 	
Test Procedure:	 Setup with frequency 3550-3570MHz and power level 20dBm/MHz Enable AP service from Ruckus Cloud management Check EUD Tx Frequency and power Disable AP service from Ruckus Cloud management Check EUD stops transmission within 10seconds. Setup with 3590-3610MHz & power level 8dBm/MHz Enable AP service from Ruckus Cloud management Check EUD Tx Frequency and power Disable AP service from Ruckus Cloud management Check EUD Tx Frequency and power Disable AP service from Ruckus Cloud management Check EUD Tx Frequency and power Disable AP service from Ruckus Cloud management Check EUD transmission within 10seconds. 	
Test setup:	10. Check EUD stops transmission within Toseconds.	



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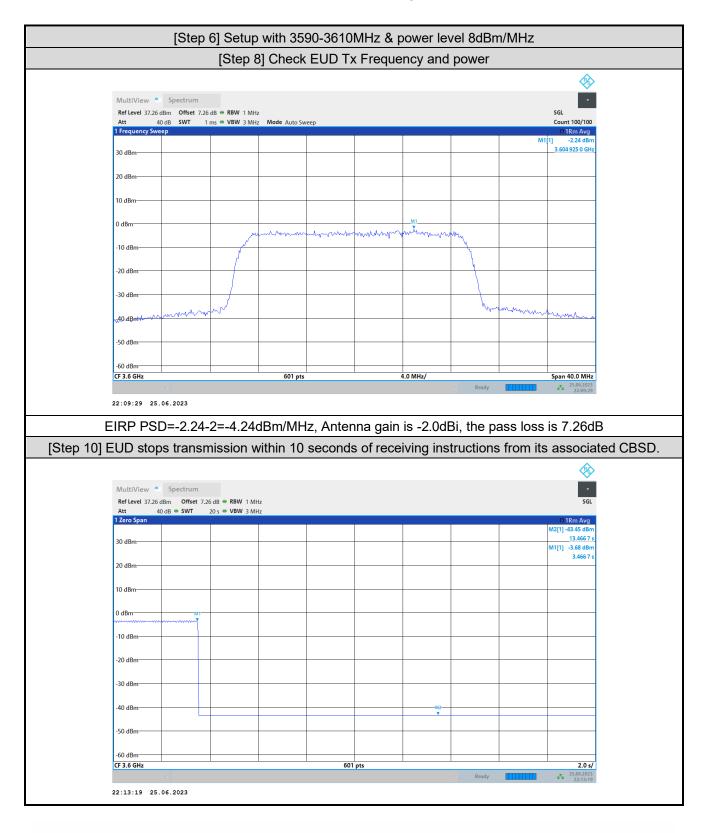


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5 Main Test Instruments

RF conducted test						
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. date (yyyy/mm/dd)	Cal.Due date (yyyy/mm/dd)	
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	HTC-1	SZ-WRG-M- 032	2023/02/17	2024/02/16	
Signal &Spectrum Analyzer	Rohde & Schwarz	FSV	SZ-WRG-M- 012	2023/02/16	2024/02/15	
Base station	Baicells	mBS31001H FCC ID: 2AG32MBS3100196N	SZ-WRG-M- 111	NA	NA	



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6 Measurement Uncertainty

For a 95% confidence level (k = 2), the measurement expanded uncertainties for defined systems, in

accordance with the recommendations of ISO 17025 as following:

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 9.84Hz
2	RF conducted power	± 0.42dB
Domark:		

Remark:

The U_{lab} (lab Uncertainty) is less than U_{cispr/ETSI} (CISPR/ETSI Uncertainty), so the test results

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.



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7 Appendixes

Setup Photos

Appendix A.4 - Setup Photos-part96.47

---End of Report---



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