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Report No.: 2204RSU026-U4 Report Version: V01 Issue Date: 05-13-2022

TESTING LABORATORY

CERTIFICATE #3628.01

RF Exposure Evaluation Declaration

FCC ID: XMR202111EG915ULA

Applicant: Quectel Wireless Solutions Company Limited

Product: LTE Module

Model No.: EG915U-LA

Brand Name: Quectel

Procedure(s): KDB 447498 D01v06

Conclusion: Complies

Sunny Sun

Approved By:

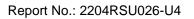
Approved By:

Robin Wu

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.





Revision History

Report No.	Version	Description	Issue Date	Note
2204RSU026-U4	Rev. 01	Initial Report	05-13-2022	Valid



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

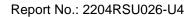
1.2. Manufacturer

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

\boxtimes	Test Site - MRT Suzhou Laboratory				
	Laboratory Location (Suzhou - Wuzhong)				
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China				
	Laboratory Locat	ion (Suzhou - SIP)			
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accre	editations			
	A2LA: 3628.01		CNAS	: L10551	
	FCC: CN1166		ISED:	CN0001	
	VCCI:	□R-20025	□G-20034	□C-20020	□T-20020
	VCCI.	□R-20141	□G-20134	□C-20103	□T-20104
	Test Site - MRT S	henzhen Laborato	ry		
	Laboratory Locat	ion (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: L3261-19072	25			
	FCC: 291082, TW	3261	ISED:	TW3261	

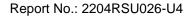




1.4. Product Information

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.





2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Average Time (Minutes)	
(A) Limits for Occupational/ Control Exposures					
300-1500			f/300	6	
1500-100,000			5	6	
(B) Limits for General Population/ Uncontrolled Exposures					
300-1500			f/1500	6	
1500-100,000			1	30	

f= Frequency in MHz

Calculation Formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm²

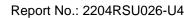
Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.





2.2. Test Result of RF Exposure Evaluation

Product	LTE Module
Test Item	RF Exposure Evaluation

Test Mode	Frequency	Maximum	Antenna	ERP	Power Density	Limit
	Band (MHz)	Conducted	Gain	(EIRP)	at 20cm	(mW/
		Power (dBm)	(dBi)	(dBm)	(mW/cm ²)	cm²)
GSM850	824 ~ 849	27.00	6.00	33.00	0.3969	0.5493
PCS1900	1850 ~ 1910	23.00	10.00	33.00	0.3969	1.0000
LTE B2	1850 ~ 1910	25.70	6.30	32.00	0.3153	1.0000
LTE B4	1710 ~ 1755	25.70	6.30	32.00	0.3153	1.0000
LTE B5	824 ~ 849	25.70	6.30	32.00	0.3153	0.5493
LTE B7	2500 ~ 2570	25.70	6.30	32.00	0.3153	0.4660
LTE B66	1710 ~ 1780	25.70	6.30	32.00	0.3153	1.0000
Bluetooth	2402 ~ 2480	7.41	5.38	12.79	0.0380	1.0000

WWAN	Bluetooth	Σ (Power Density / Limit)
Power Density / Limit	Power Density / Limit	
0.3969	0.038	0.43

Note:

- 1. For colocation analysis, GSM900 is chosen for summation due to the highest (power density / limit) among all WWAN wireless modes.
- 2. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter / antenna included in the simultaneous transmission) / (corresponding MPE limit)], for WWAN + Bluetooth.



Appendix A – EUT Photograph

Refer to "2110RSU013-UE" file.