

FCC RF EXPOSURE REPORT

FCC ID: XMR20211108FC41D

Project No. : 2111H032
Equipment : Stand-alone Wi-Fi&Bluetooth module
Brand Name : Quectel
Test Model : FC41D
Series Model : N/A
Applicant : Quectel Wireless Solutions Co., Ltd
Address : 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 : Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China 200233
Factory : N/A
Address : N/A
Date of Receipt : Nov. 25, 2021
Date of Test : Nov. 30, 2021~Jan. 06, 2022
Issued Date : Jan. 18, 2022
Report Version : R00
Test Sample : Engineering Sample No.: SH20211125128 for radiated, SH20211125127 for conducted
Standard(s) : FCC Part 2.1091
FCC Title 47 Part 2.1091
KDB 447498 D01 General RF exposure guidance v06

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Antonio Long

Prepared by : Antonio long

Ryan Wang

Approved by : Ryan Wang



TESTING CERT #5123.03

Add: No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210, China

TEL: +86-021-61765666

Web: www.newbtl.com

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Jan. 18, 2022

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For 2.4G

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	2

Note: The antenna gain provided by the manufacturer

For BLE

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	2

Note: The antenna gain provided by the manufacturer.

2. TEST RESULTS

For 2.4G

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. tune up Power (dBm)	Max. tune up Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2	1.5849	23.50	223.8721	0.070588	1	Complies

For BLE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. tune up Power (dBm)	Max. tune up Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2	1.5849	7.50	5.6234	0.001773	1	Complies

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm ²)	Power Density (S) (mW/cm ²)	Total	Limit of Power Density (S) (mW/cm ²)	Test Result
2.4GHz	BLE			
0.070588	0.001773	0.07236	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance.

End of Test Report