

FCC RF EXPOSURE REPORT

FCC ID: XMR2022SC262RWF

Project No. : 2204H021
Equipment : Smart Module
Brand Name : Quectel
Test Model : SC262R-WF
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
Date of Receipt : May 20, 2022
Date of Test : May 24, 2022~Jun. 08, 2022
Issued Date : Jun. 29, 2022
Report Version : R00
Test Sample : Engineering Sample No.: SH2022052370 for radiated, SH2022052371 for conducted.
Standard(s) : 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.

Maker Qi

Prepared by : Maker Qi



TESTING CERT #5123.03

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-6-2204H021	R00	Original Report	Jun. 29, 2022	Valid

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	P/N	Antenna Type	Connector	Gain (dBi)
1	 圣丹纳 SAINTENNA	SAA31578A	Dipole	SMA-J	0.47

Note:

The antenna gain is provided by the manufacturer.


For 5G :

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	 圣丹纳 SAINTENNA	SAA31578A	Dipole	SMA-J	1.28

Note:

The antenna gain is provided by the manufacturer.

For BT and BLE:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	 圣丹纳 SAINTENNA	SAA31578A	Dipole	SMA-J	0.47

Note:

The antenna gain is provided by the manufacturer.

2. TEST RESULTS

For BLE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
0.47	1.1143	0.50	1.1220	0.000249	1	Complies

For BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
0.47	1.1143	9.50	8.9125	0.001976	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
0.47	1.1143	23.50	223.8721	0.049629	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.28	1.3428	13.00	19.9526	0.005330	1	Complies

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

End of Test Report