

FCC RF EXPOSURE REPORT

FCC ID: 2AAGE-B48

Project No. : 2201H015
Equipment : LTE Module
Brand Name : Vantron
Test Model : VT-MOD-CELL-B48
Series Model : N/A
Applicant : Chengdu Vantron Technology Co., Ltd.
Address : No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China
610045
Manufacturer : Chengdu Vantron Technology Co., Ltd.
Address : No.5 GaoPeng Road, Hi-Tech Zone, Chengdu, SiChuan, P.R. China
610045
Date of Receipt : Jan. 07, 2022
Date of Test : Jan. 10, 2022~ Jan. 26, 2022
Issued Date : Mar. 17, 2022
Report Version : R01
Test Sample : Engineering Sample No.: SH2022010745 for EUT
SH2022010745-4 for adapter
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

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TESTING CERT #5123.03

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2201H015	R00	Original Issue.	Feb. 15, 2022	Invalid
BTL-FCCP-1-2201H015	R01	Revised report to address TCB's comments.	Mar. 17, 2022	Valid

1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China
BTL's Test Firm Registration Number for FCC: 476765
BTL's Designation Number for FCC: CN1241

2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

where:

S = power density

P

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

3. TEST RESULTS

For LTE Band 48

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
1.00	1.2589	22.00	158.4893	0.039694	1	Complies

For BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.00	3.1623	15.00	31.6228	0.019895	1	Complies

For WLAN 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.00	3.1623	25.00	316.2278	0.198945	1	Complies

For WLAN 5GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.00	3.1623	25.00	316.2278	0.198945	1	Complies

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	CPD/LPD	Note
0.019895	1	0.019895	BT
0.198945	1	0.198945	2.4G
0.198945	1	0.198945	5G
0.039694	1	0.039694	LTE Band 48

BT	WLAN	WWAN	Total	Limit	Test Result
0.019895	0.198945	0.039694	0.258533	1	Complies

- Note: 1.The calculated distance is 20 cm.
 2.Output power including tune up tolerance.
 3.CPD=Calculation power density.
 4.LPD=Limit of power density.
 5.This MPE analysis is applicable to any collocated transmitters with Max. peak output power for
 WLAN 2.4G & WLAN 5G: 25dBm /BT 15dBm.
 6.A maximum antenna gain of 5 dBi for WLAN and BT has been assumed for all collocated antennas.
 7. All antenna gains in this report are the maximum gains calculated according to customer requirements.

End of Test Report